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ABSTRACT

In summer 1984, a study was conducted to assess the status of microcomputer applications in the public vocational-technical facilities of Michigan, Indiana, Minnesota, Illinois, Ohio, and Wisconsin. Mailing lists provided by the vocational education divisions of each state department of education were used to survey 705 individuals regarding hardware and the applications of software in administration, instructional support, counseling/job placement, and vocational education. Study findings, based on a regional response rate of 39%, included the following: (1) Apple/Apple Compatible, IBM-PC/IBM Compatible, and Radio Shack microcomputers dominated the institutions' inventories; (2) a moderate overall percentage of facilities had microcomputers communicating to a mainframe; (3) local area networking was being utilized or under consideration to a significant extent in every state; (4) there was a significant amount of administrative software application activity in accounting/finance, analysis spreadsheet, data base applications, and word processing in every state; (5) most of the activity in instructional applications of software was in the areas of word processing and computer-assisted instruction; (6) microcomputers were used extensively in job placement, counseling, and occupational information systems; and (7) software applications in health occupations were less apparent than in other vocational-technical programs. Study findings are reported primarily in graphs and tables. (LAL)

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ED247966

## PREFACE

# Vocational-Technical Microcomputer Applications in Michigan and Bordering States (Upper Midwest Region) A Status Report: Summer 1984

by
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Professor of Vocational Education
and
Deborah Obert
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Center for Occupational Education
Ferris State College
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This status report should provide relevant data for those involved with professional decisions regarding microcomputer applications (Hardware and Software) in vocational programming and professional development activities. The proliferation of microcomputer applications into many facets of the teachers, counselors and administrators job role is obvious to even the casual observer. This analysis is intended to provide the reader a statistical view of how this is impacting on curriculum needs, professional development needs and the delivery of services.

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# Vocational-Technical Microcomputer Applications in Michigan and Bordering States (Upper Midwest Region) A Status Report: Summer 1984

## Introduction and Acknowledgements

This report has been prepared to assess the current status of microcomputer applications in the public vocational-technical facilities of Michigan and bordering states. It is a revised follow-up and extension of a similiar Michigan investigation conducted by the Center for Occupational Education at Ferris State College in the Spring of 1983.

Because of the extensive amount of data collected by the survey instruments, this printed analysis has been prepared with an emphasis on graphs and tables thereby reducing narrative to an absolute minimum. The report is divided into three major divisions: Hardware Information; Software Information; and General Findings/Recommendations (An appendix contains the survey instruments and tables).

Within the Hardware and Software divisions a listing of sub-topics is identified with reference to the appropriate chart(s) or graph(s). Every attempt has been made to allow the reader to compare each sub-topic for the region with each state in simple and clear visuals. It is assumed that the end user of this information is seeking data for the decision making process, whether that is for a personal professional decision or an institutional decision involving significant long range commitments. Accordingly, only general findings and recommendations are outlined in narrative form.

This investigation was completed with financial support and cooperation from a variety of Michigan Vocational Education Professional Groups. Professional cooperation was also received from scores of vocational educators in Michigan, Illinois, Indiana, Minnesota, Ohio, and Wisconsin who reponded so well (39% overall) to the detailed questionnaire.

The survey instrument was mailed to individuals appearing on mailing lists provided by responsible personnel in the vocational education division of each State Department of Education. These persons were identified by Dr. Edward Cory, Professional Development Consultant for Vocational-Technical Education Services, M.D.E. and each played a vital role in getting the study underway.

The Center for Occupational Education sincerely appreciates the support and cooperation provided by those mentioned above. Each has been provided a copy of the report and a separate letter of thanks.

This report was funded by the following Michigan Vocational Education Organizations:

Michigan Association of Area School Administrators
State Advisory Council for Vocational Education
Michigan Occupational Deans Administrative Council
Michigan Occupational Education Association
Michigan Council of Vocational Administrators

Special technical assistance was provided by Sid Sytsma, Director of Academic Computing and Fred Swartz, Director of Testing Center, Ferris State College. Their advice, counsel and utilization of microcomputer equipment was invaluable to the implementation and completion of this survey.

## Survey Design

Upon receipt of mailing lists from vocational education contact persons in Michigan and bordering states a total of seven hundred and five questionnaires with pre-coded electronic sense forms were forwarded. When the returns appeared to stop, data from two hundred and seventy two facilities were read and processed electronically. The processed data was analyzed and formulated into one hundred twenty six easy to read tables. The development of all the tables included in the appendix was completed on a microcomputer with a peripheral printer.

These tables were then further analyzed to allow easy reader interpretation. The resulting graphs and tables are intended to allow the vocational-technical educator to further analyze those items of special interest or relevance. The table of contents and indexes for Part I and Part II provide direction to the topics analyzed. Also, tables are included in the appendices to provide a complete record of resultant data.

In an attempt to provide clarity to the pictorial analysis in the use of charts and graphs, the actual count of facilities responding is noted by an "n". Additionally, a response percentage is included to tell the reader what this number represents compared to the total number of solicited facilities. These two figures are included on every chart, graph and set of tables.

## * * * * * * * * * * * * * * * * * * INDEX * * * * * * * * * * * * * * * * * *

### Part I
### Microcomputer Hardware
### (Appropriate Graph/Table Noted In Parenthesis)

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Part I

Section A

ESTIMATED
HARDWARE INVENTORY

I - A - 1

Manufacturer/Manufacturer Compatible Inventory Rankings
for
Reported Estimate of Current & Planned Inventories 1984-1985
of
Vocational-Technical Facilities

Michigan
N=65 (56% Response)
1. Apple/Apple Compatibles
2. IBM PC/IBM Compatibles
3. Radio Shack
4. Commodore and Others

Illinois
N=37 (49% Response)
1. Apple/Apple Compatibles
2. Radio Shack
3. IBM PC/IBM Compatibles
4. Commodore and Others

Indiana
N=26 (33% Response)
1. Apple/Apple Compatibles
2. IBM PC/IBM Compatibles
3. Radio Shack
4. Commodore and Others

Ohio
N=50 (32% Response)
1. Apple/Apple Compatibles
2. IBM PC/IBM Compatibles
3. Radio Shack
4. Commodore and Others

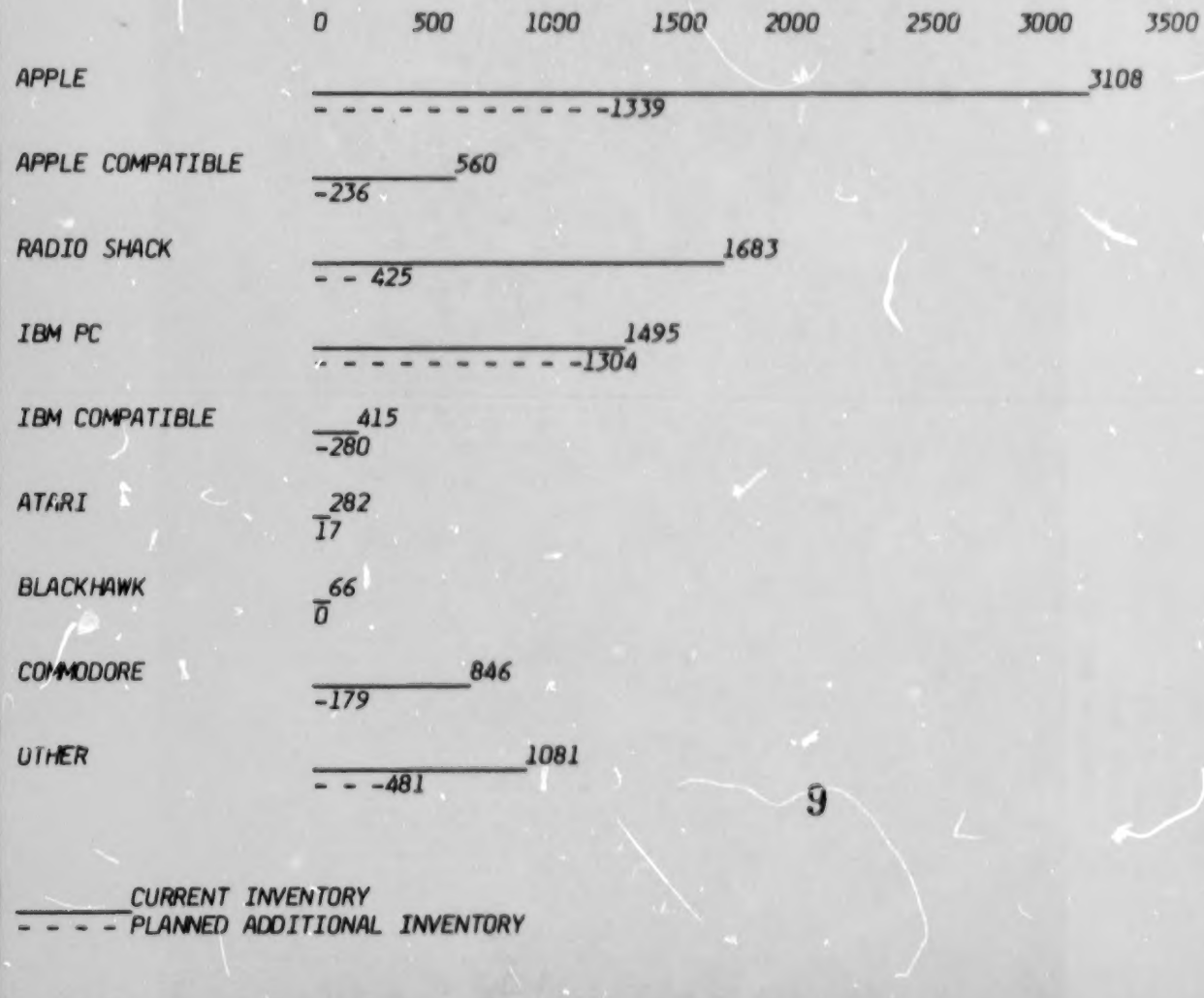
Minnesota
N=28 (35% Response)
1. Apple/Apple Compatibles
2. IBM PC/IBM Compatibles
3. Radio Shack
4. Commodore and Others

Wisconsin
N=66 (34% Response)
1. Apple/Apple Compatibles
2. IBM PC/IBM Compatibles
3. Radio Shack
4. Commodore and Others

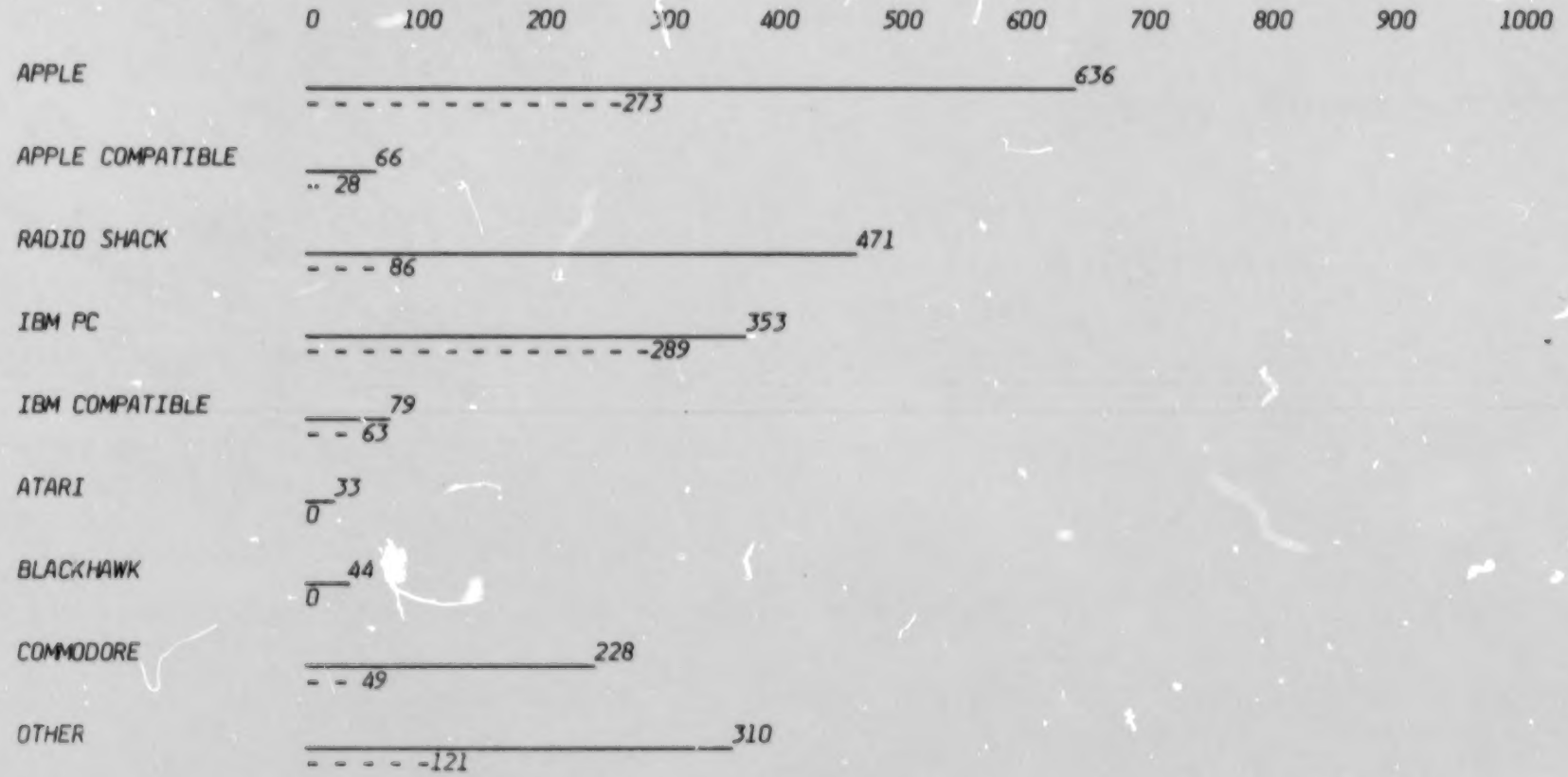
Region
N=272 (39% Response)
1. Apple/Apple Compatibles
2. IBM PC/IBM Compatibles
3. Radio Shack
4. Commodore and Others

I - A - 2

Inventory Reported
Spring 1984
Michigan and Bordering States Region
Estimated Microcomputer Inventory in Respondents Voc-Tech Facilities

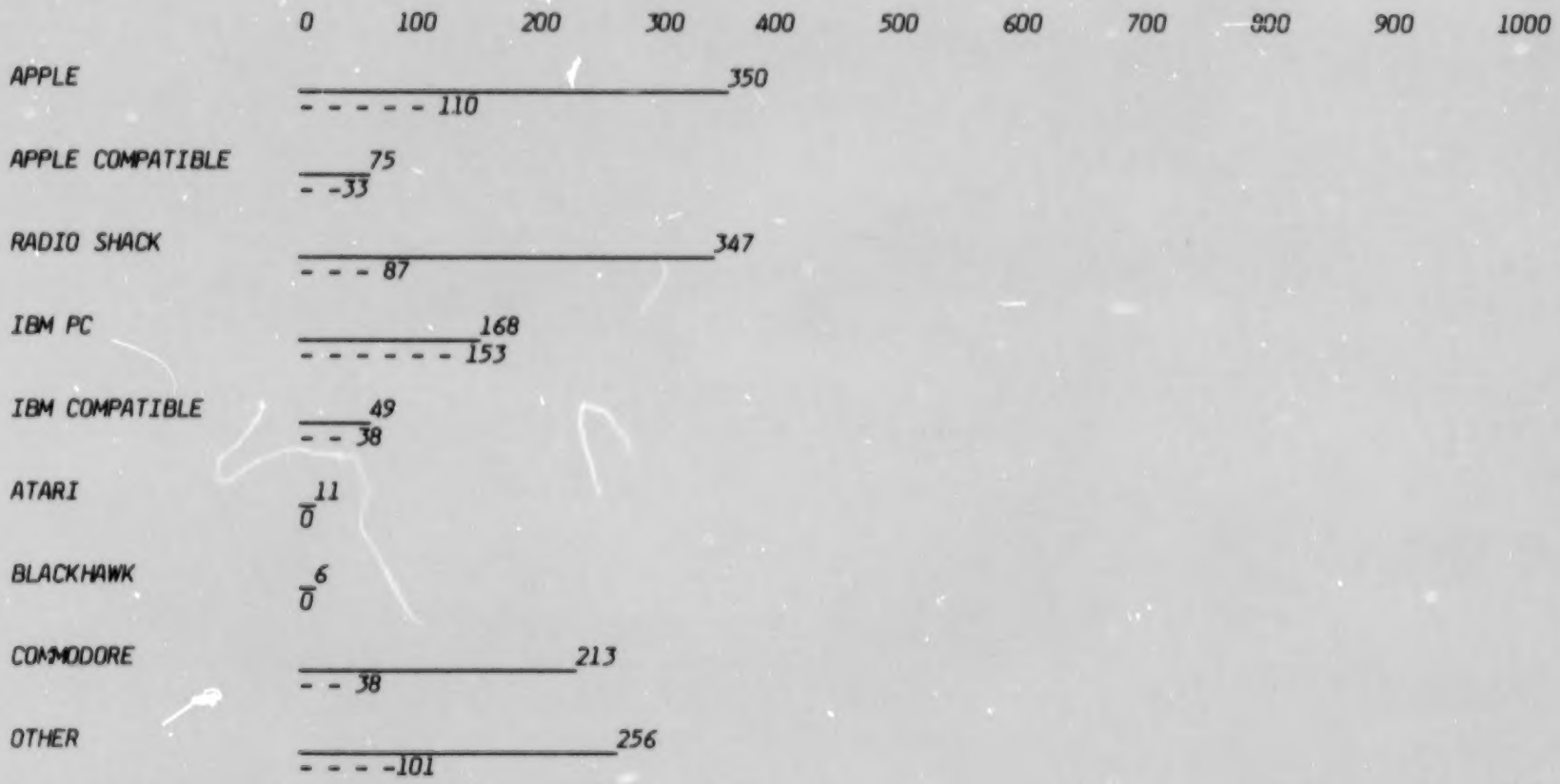


I - A - 3
Inventory Reported
Spring 1984
Michigan
N=65 (56% Response)
Estimated Microcomputer Inventory in Respondents Voc-Tech Facilities



I - A - 4

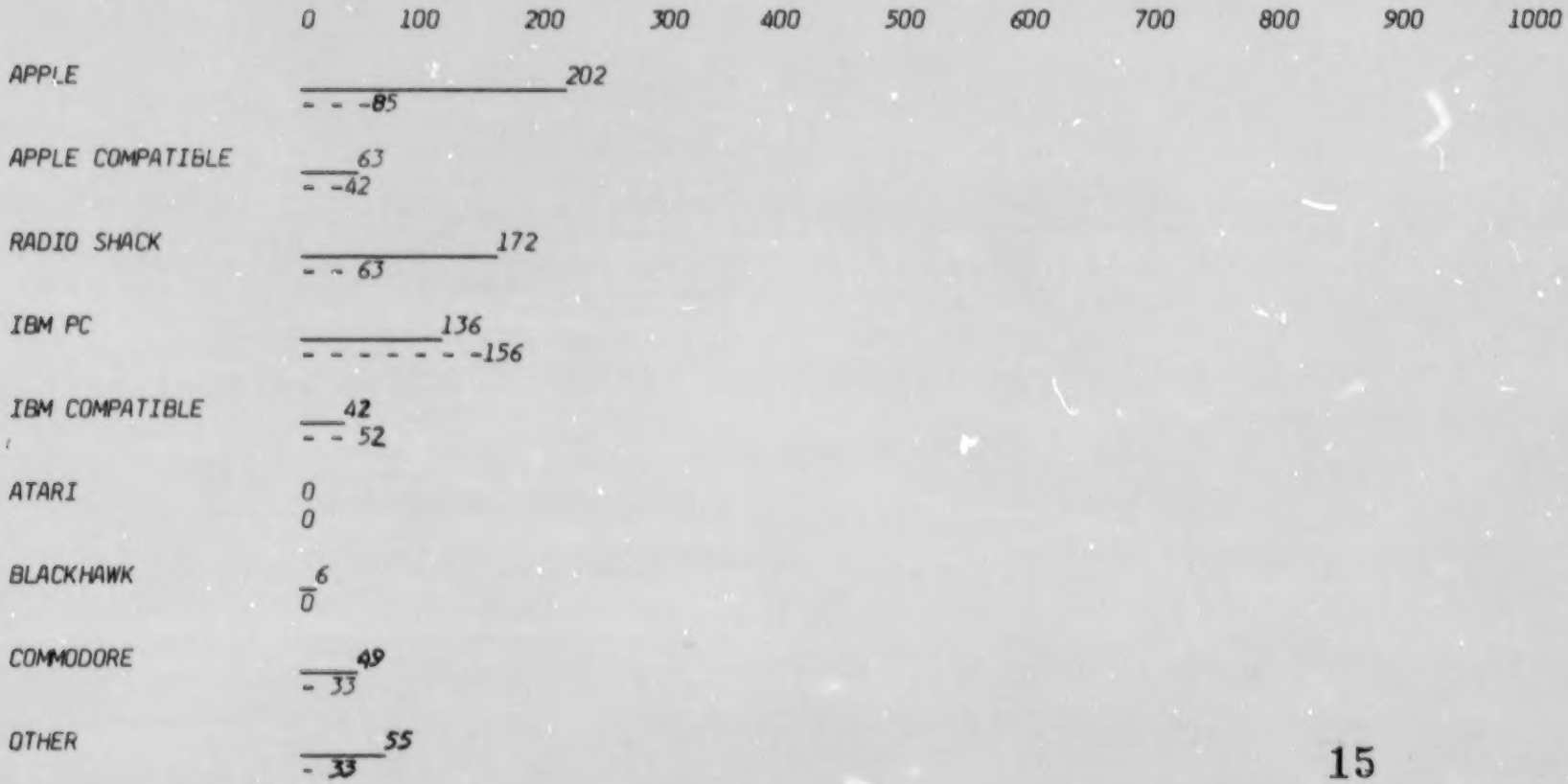
Inventory Reported
Spring 1984
Illinois
N=37 (49% Response)
Estimated Microcomputer Inventory in Respondents Voc-Tech Facilities



I - A - 5

Inventory Reported
Spring 1984
Indiana
N=26 (33% Response)

Estimated Microcomputer Inventory in Respondents Voc-Tech Facilities

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CURRENT INVENTORY
PLANNED ADDITIONAL INVENTORY

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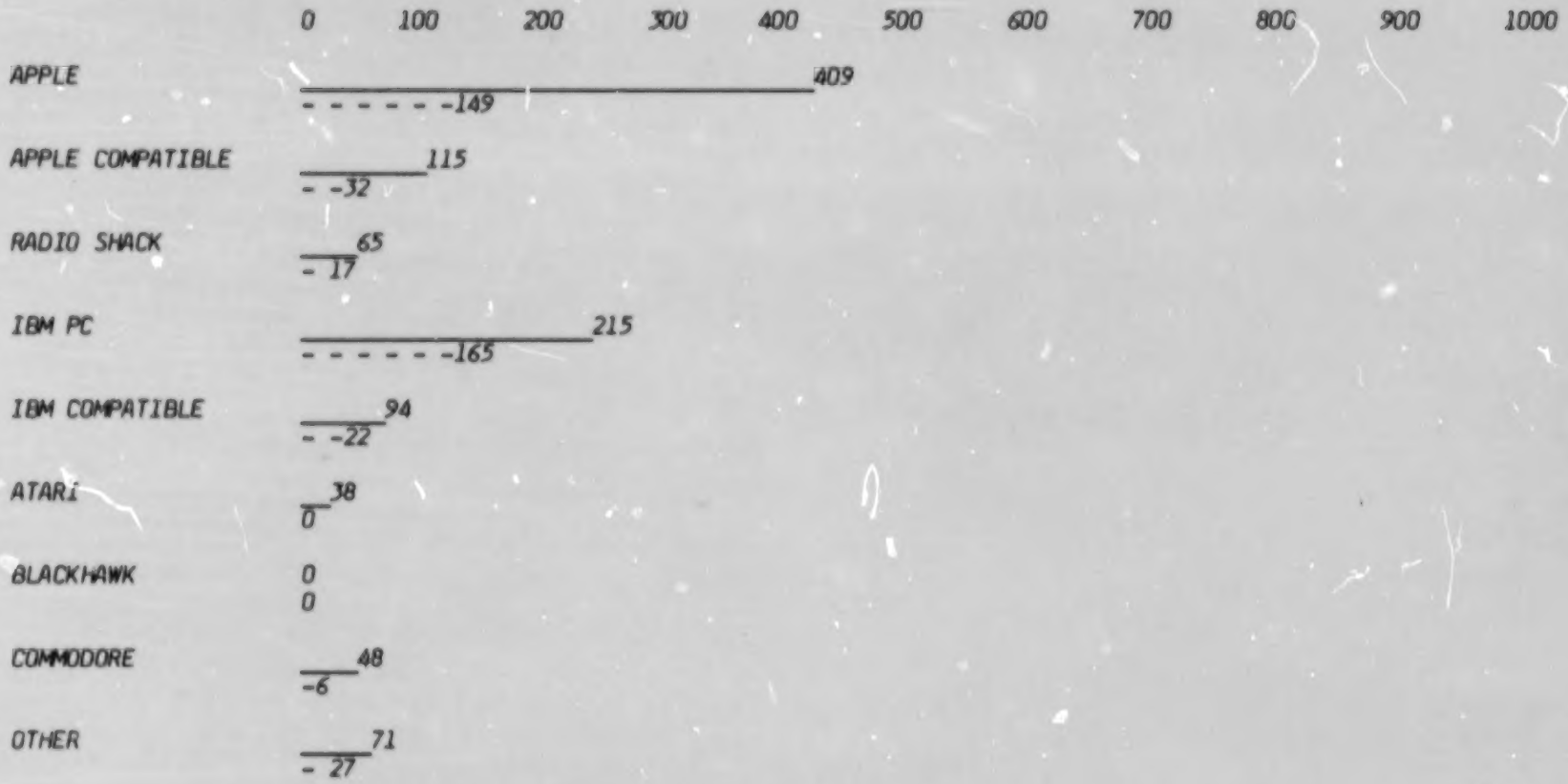
I - A - 6

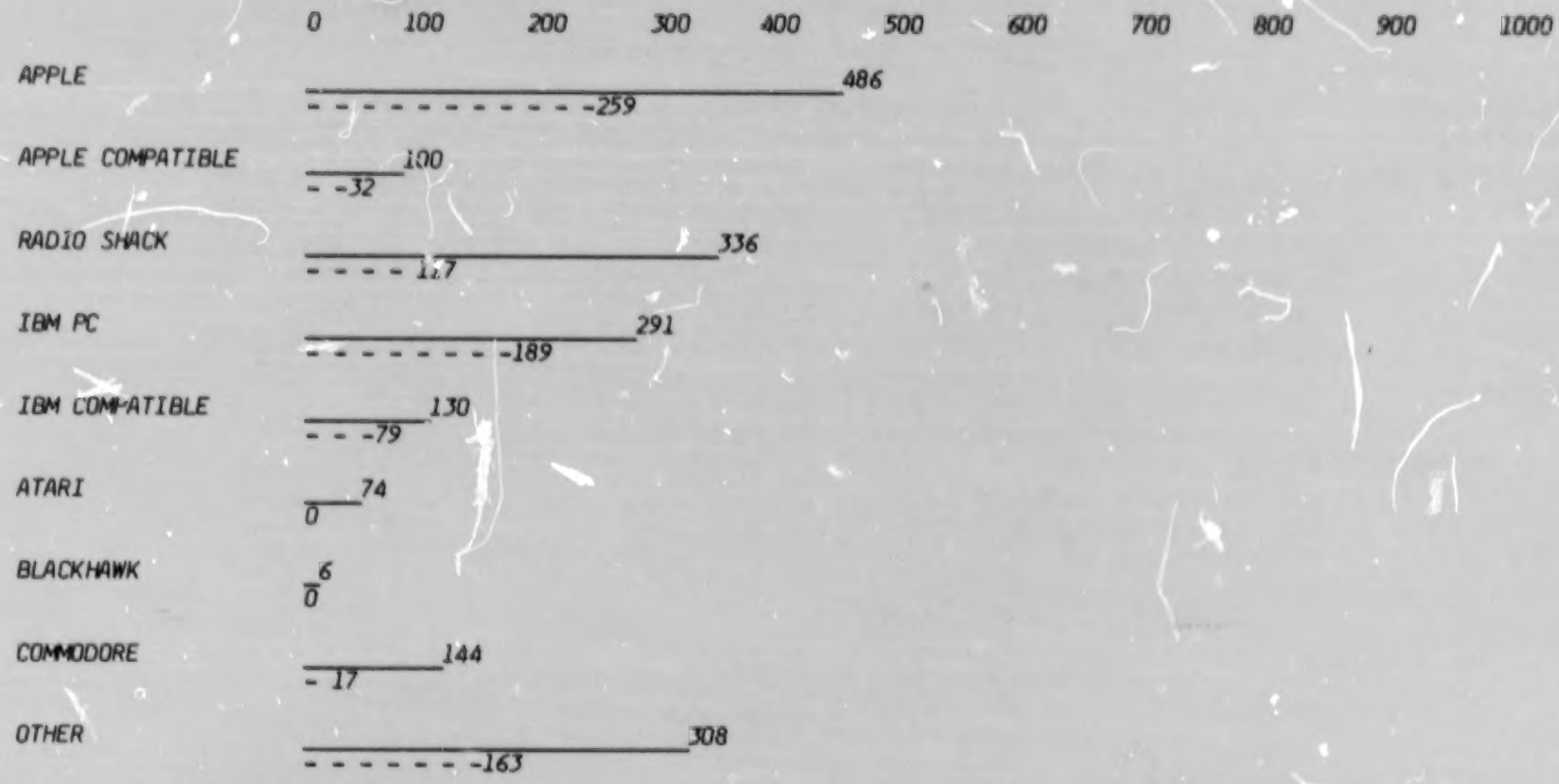
Inventory Reported
Spring 1984
Minnesota
N=28 (35% Response)
Estimated Microcomputer Inventory in Respondents Voc-Tech Facilities



I - A - 7

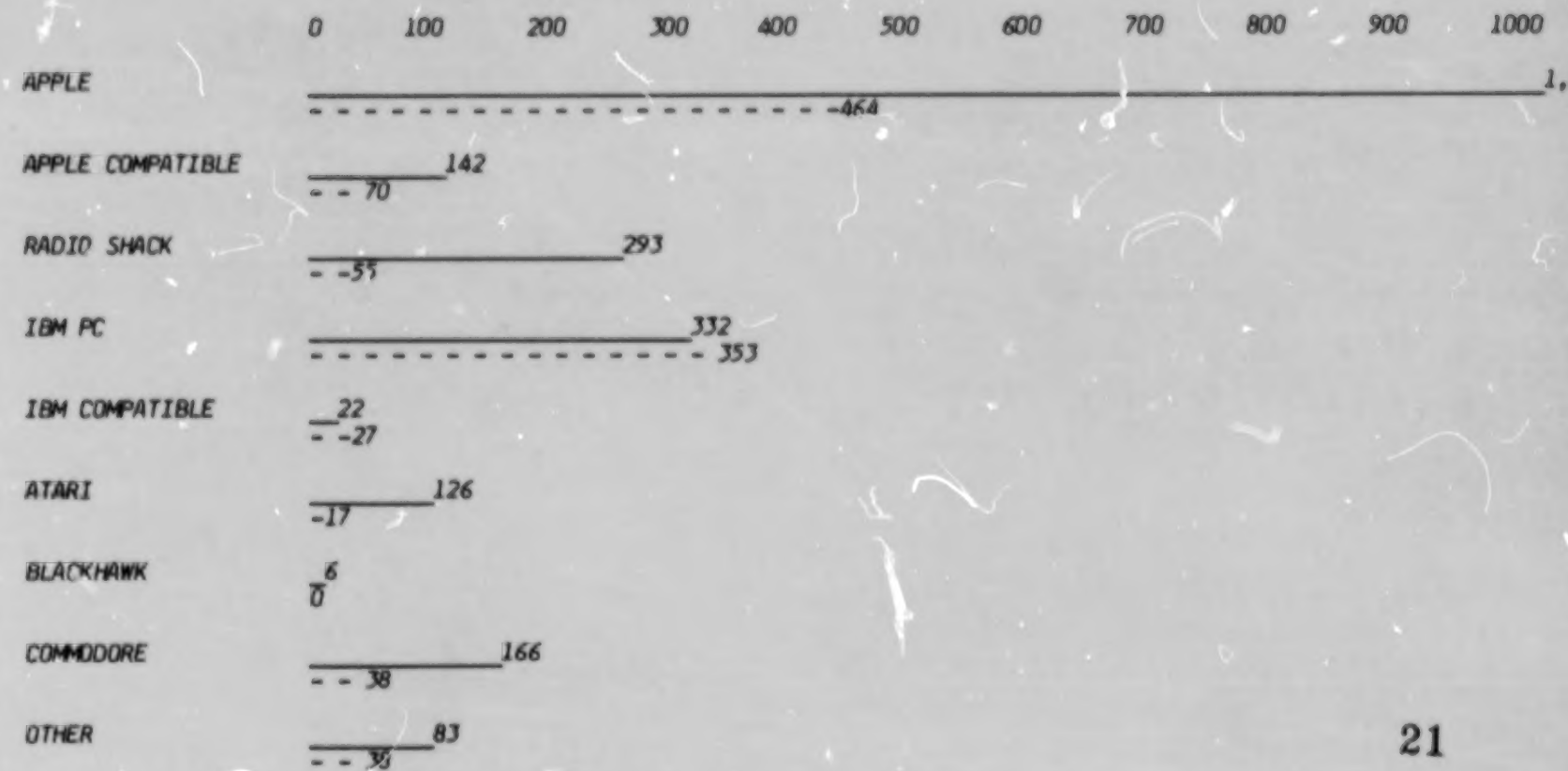
Inventory Reported
Spring 1984
Ohio
N=50 (32% Response)

Estimated Microcomputer Inventory in Respondents Voc-Tech Facilities



I - A - 8

Inventory Reported
Spring 1984
Wisconsin
N=66 (34% Response)
Estimated Microcomputer Inventory in Respondents Voc-Tech Facilities








CURRENT INVENTORY
PLANNED ADDITIONAL INVENTORY

Part I

Section B

# MICROCOMPUTER TO MAINFRAME COMMUNICATION

I - B - 1

REPORTED EXTENT OF MICROCOMPUTERS COMMUNICATING TO A MAINFRAME
IN
UPPER MIDWEST VOCATIONAL-TECHNICAL FACILITIES
SPRING 1984

| State | Estimated Number of Microcomputers | Number of Facility Locations | Facilities Indicating NONE and/or Not Responding to Question |
|---|---|---|---|
| MICHIGAN N=63 (56% Response) | 121 | 11 | 54 |
| ILLINOIS N=37 (49% Response) | 146 | 12 | 25 |
| INDIANA N=26 (33% Response) | 54 | 8 | 18 |
| MINNESOTA N=28 (35% Response) | 53 | 6 | 22 |
| OHIO N=50 (32% Response) | 281 | 22 | 28 |
| WISCONSIN N=66 (34% Response) | 121 | 22 | 44 |
| TOTAL REGION N= 272 (39% Response) | 776 | 81 | 191 |

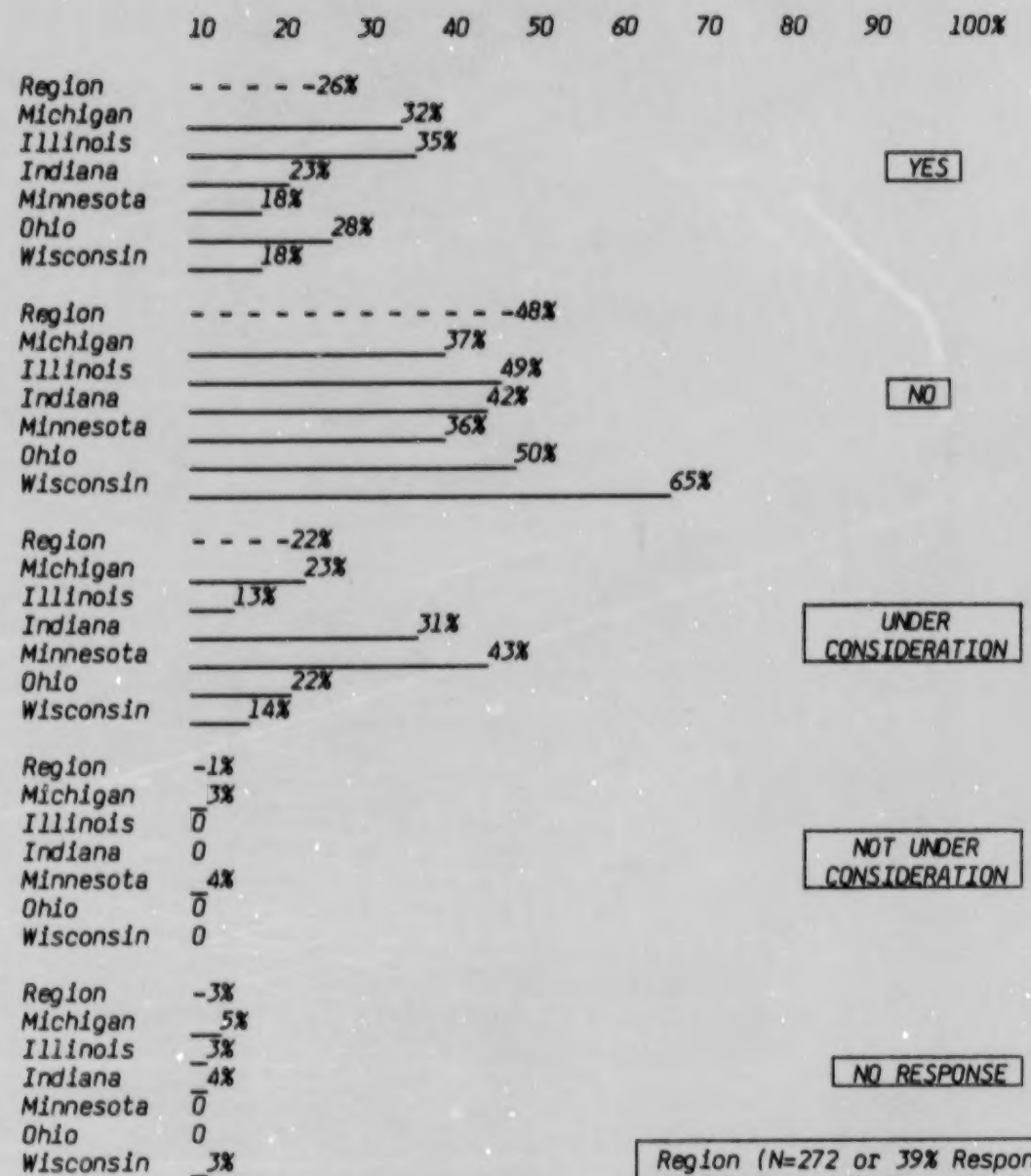
Part I

Section C

# LOCAL AREA NETWORKING

I - C - 1

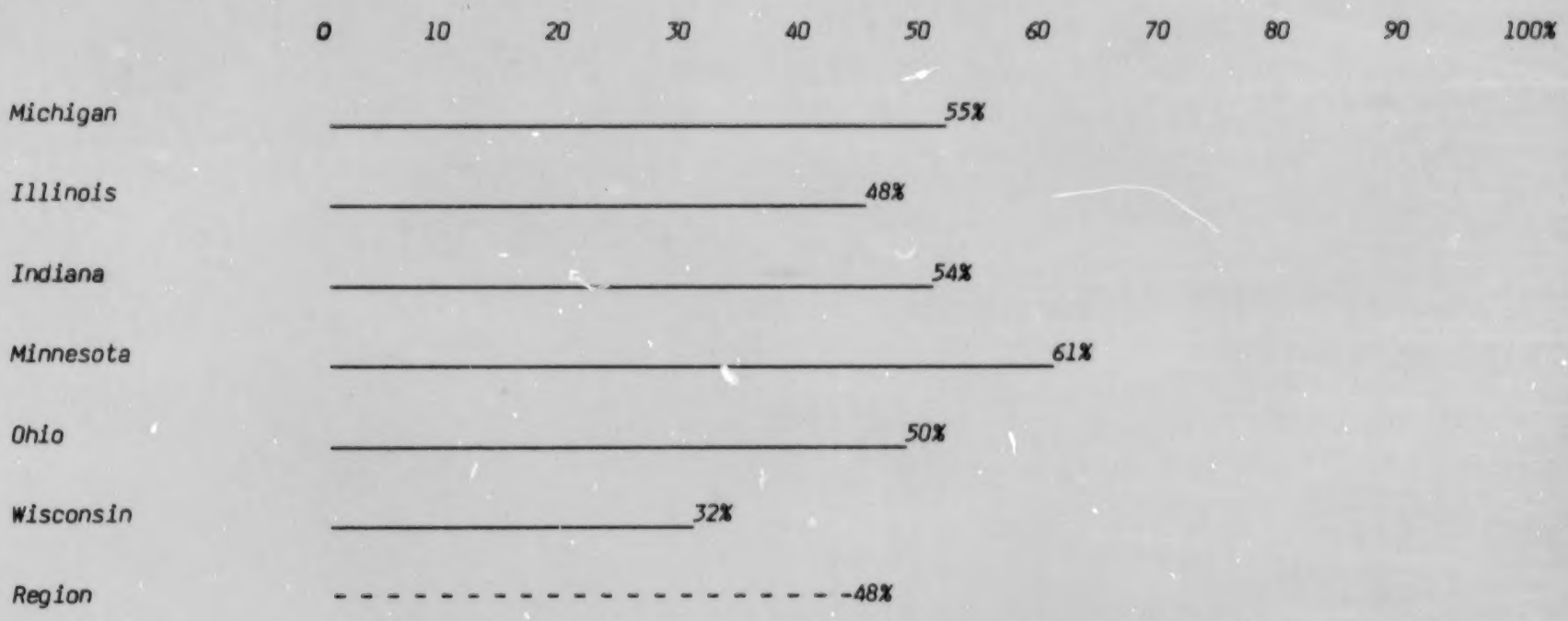
Vocational-Technical Facility
Use of Local Area Networking
Comparison of Michigan and Bordering States
Spring 1984




Region (N=272 or 39% Response Rate)
MI (N=65 or 56% Response Rate)
Il. (N=37 or 49% Response Rate)
IN (N=26 or 33% Response Rate)
MN (N=28 or 35% Response Rate)
OH (N=50 or 32% Response Rate)
WI (N=66 or 34% Response Rate)
STATE % _____
REGION % - - - - - - - - -

I - C - 2

Vocational-Technical Facility
Percentage of Respondents Identifying
Local Area Networking "in use" and/or "under consideration"
Spring 1984




Region (N=272 or 39% Response Rate)
MI (N=65 or 56% Response Rate)
IL (N=37 or 49% Response Rate)
IN (N=26 or 33% Response Rate)
MN (N=28 or 35% Response Rate)
OH (N=50 or 32% Response Rate)
WI (N=66 or 34% Response Rate)
STATE % _____
REGION % - - - - - - - - - - -

I - C - 3

Vocational-Technical Facility
Identified Categories
of
Local Area Networking "in use" and/or "under consideration"

| | A. Classroom/Building Network | B. Local Education Agency Network | C. Interagency Network | D. A&B Combined | E. A, B, & C Combined | F. No Response |
|---|---|---|---|---|---|---|
| Michigan N=65 (56% Response) | 23 | 1 | 5 | 3 | 3 | 30 |
| Illinois N=37 (49% Response) | 9 | 1 | 2 | 1 | 2 | 22 |
| Indiana N=26 (33% Response) | 11 | 1 | 0 | 1 | 1 | 12 |
| Minnesota N=28 (35% Response) | 11 | 2 | 0 | 1 | 3 | 11 |
| Ohio N=50 (32% Response) | 18 | 1 | 1 | 5 | 2 | 12 |
| Wisconsin N=66 (34% Response) | 15 | 3 | 3 | 3 | 1 | 41 |
| TOTAL REGION N=272 (39% Response) | 87 | 9 | 11 | 14 | 12 | 135 |



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Part II
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Part II

Section A

ADMINISTRATIVE APPLICATIONS

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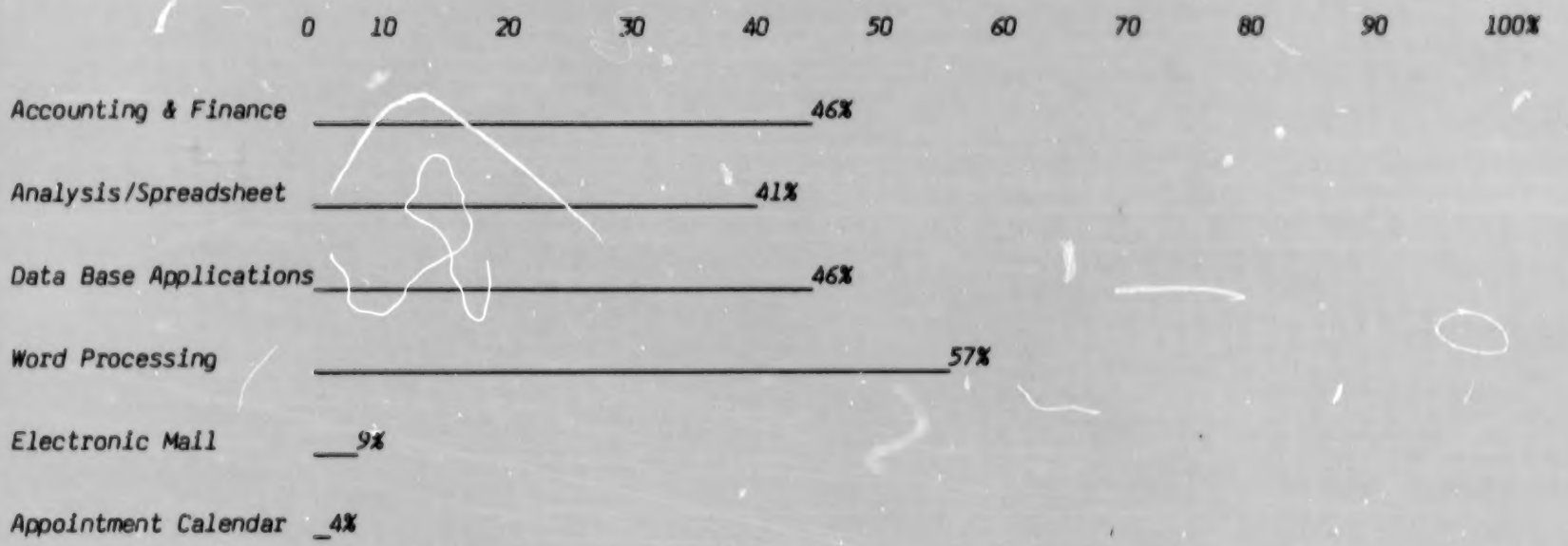
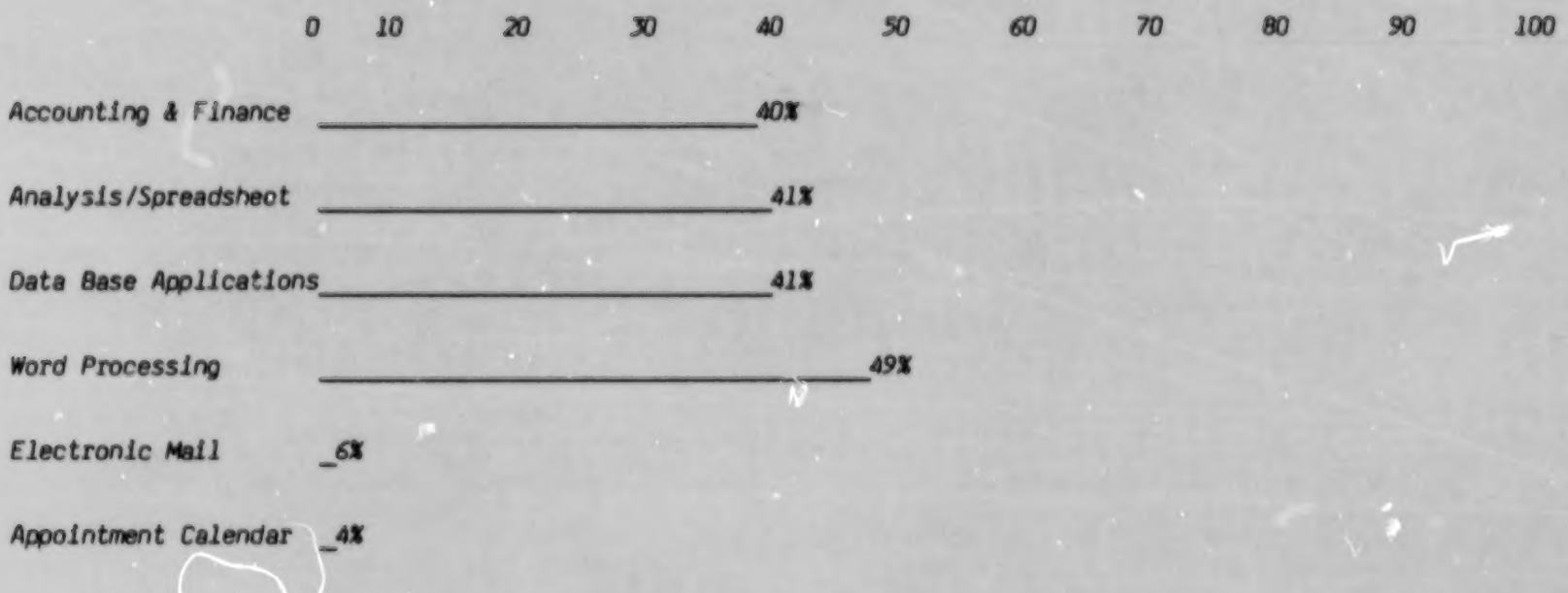
Administrative Microcomputer Applications
Michigan and Bordering States Region
N=272 (39% Response)



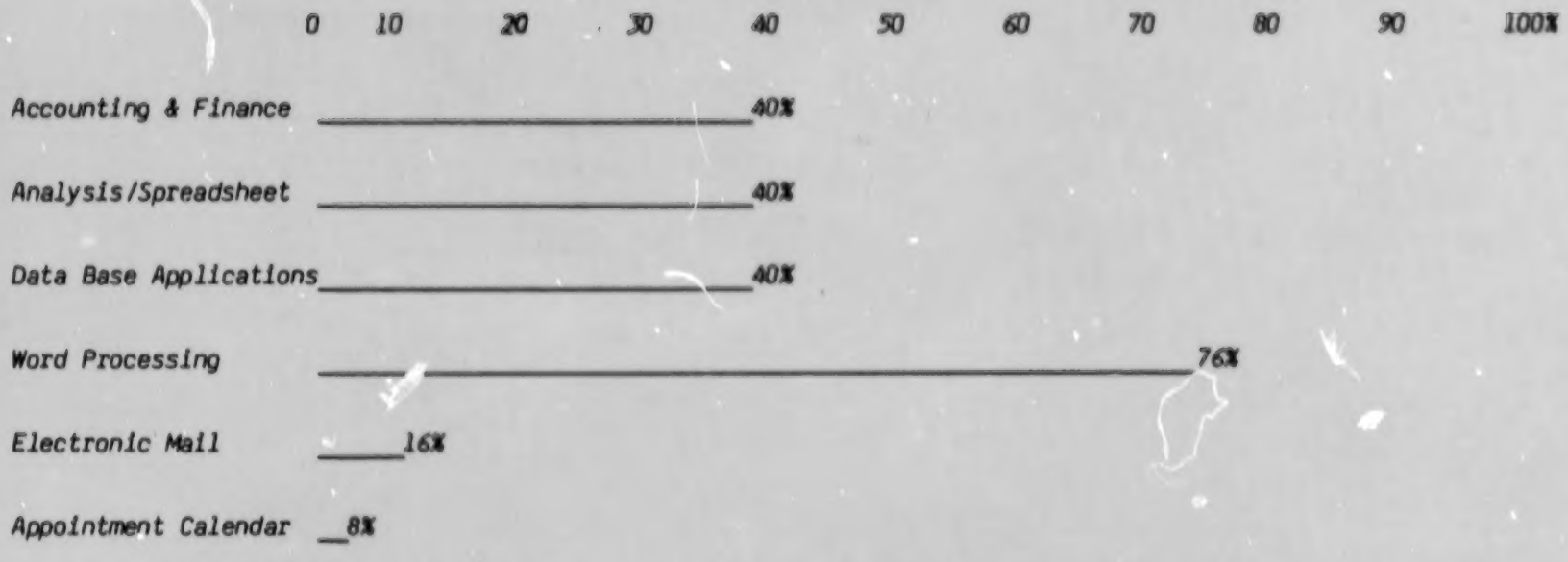
II - A - 2

Administrative Microcomputer Applications
Michigan
N=65 (56% Response)


0 10 20 30 40 50 60 70 80 90 100
Accounting & Finance 40%
Analysis/Spreadsheet 41%
Data Base Applications 41%
Word Processing 49%
Electronic Mail 6%
Appointment Calendar 4%

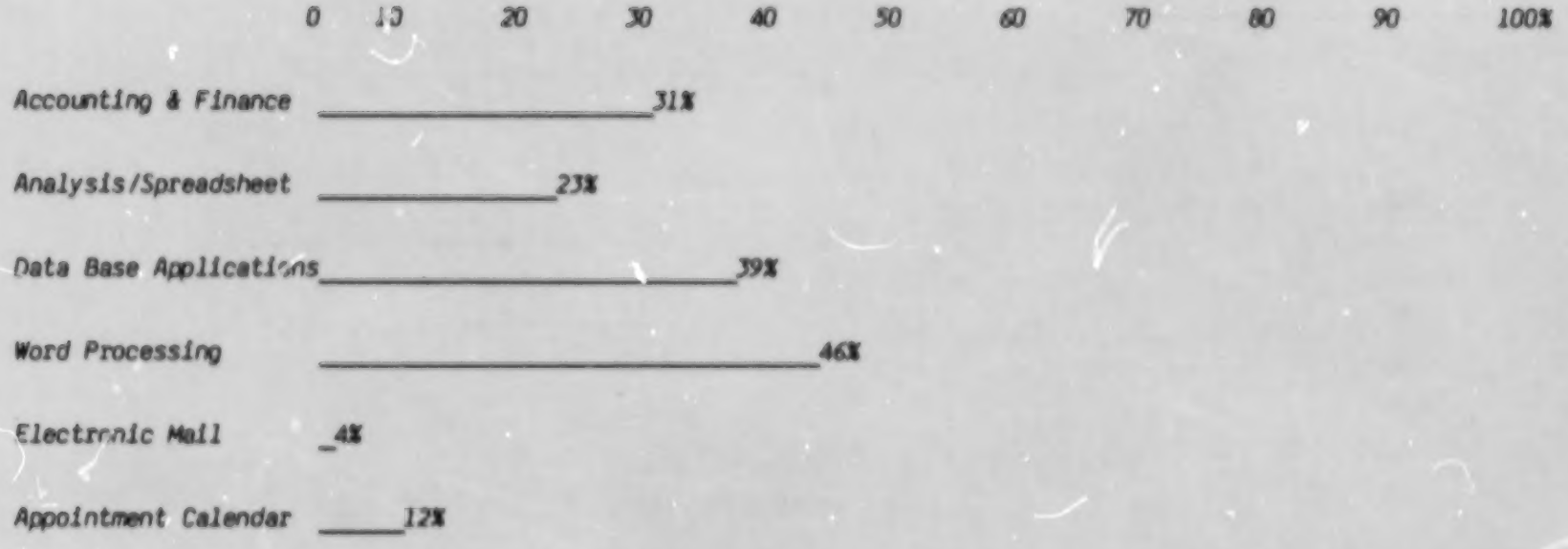
II - A - 3

Vocational-Technical Facility
Administrative Microcomputer Applications
Spring 1984
Illinois
N=37 (49% Response)


0 10 20 30 40 50 60 70 80 90 100%
Accounting & Finance 40%
Analysis/Spreadsheet 40%
Data Base Applications 40%
Word Processing 76%
Electronic Mail 16%
Appointment Calendar 8%

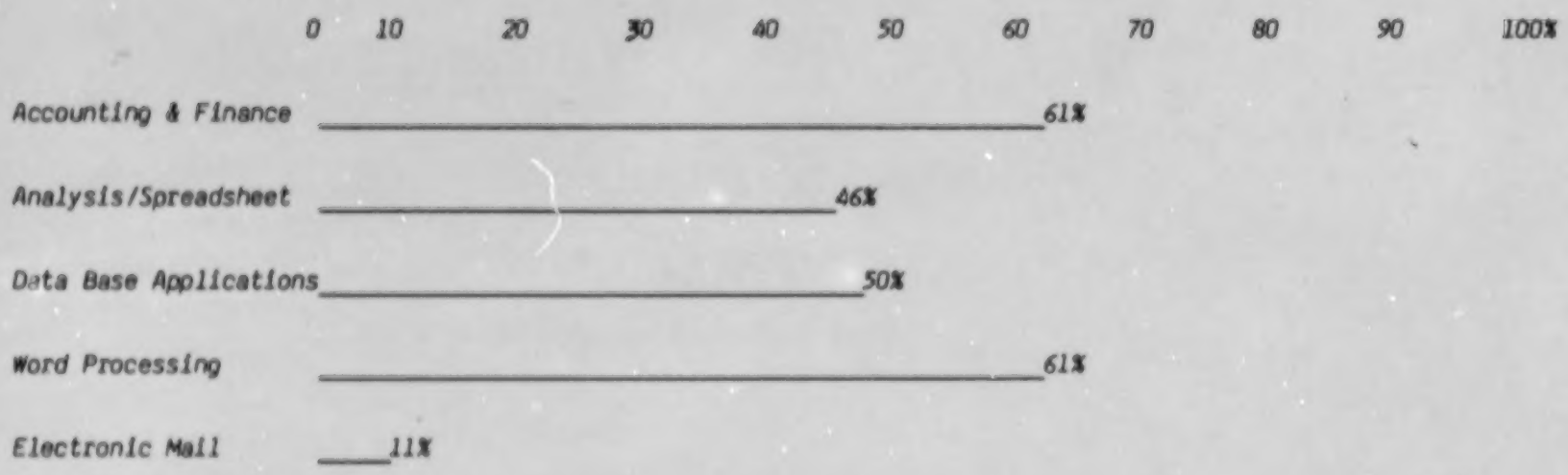
II - A - 4

Vocational-Technical Facility
Administrative Microcomputer Applications
Spring 1984
Indiana
N=26 (33% Response)



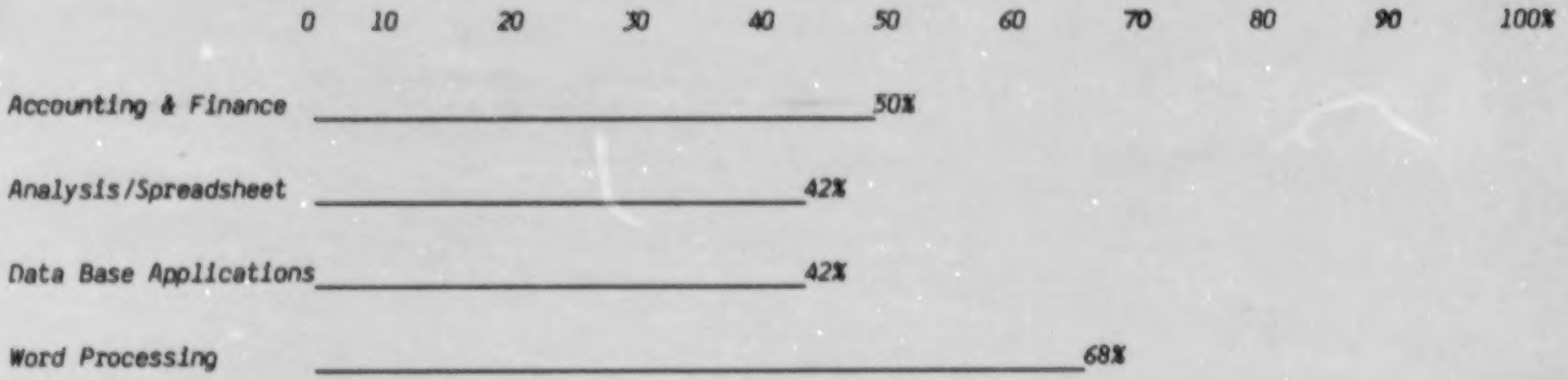
II - A - 5

Vocational-Technical Facility
Administrative Microcomputer Applications
Spring 1984
Minnesota
N=28 (35% Response)


0 10 20 30 40 50 60 70 80 90 100%
Accounting & Finance 61%
Analysis/Spreadsheet 46%
Data Base Applications 50%
Word Processing 61%
Electronic Mail 11%
Appointment Calendar 0

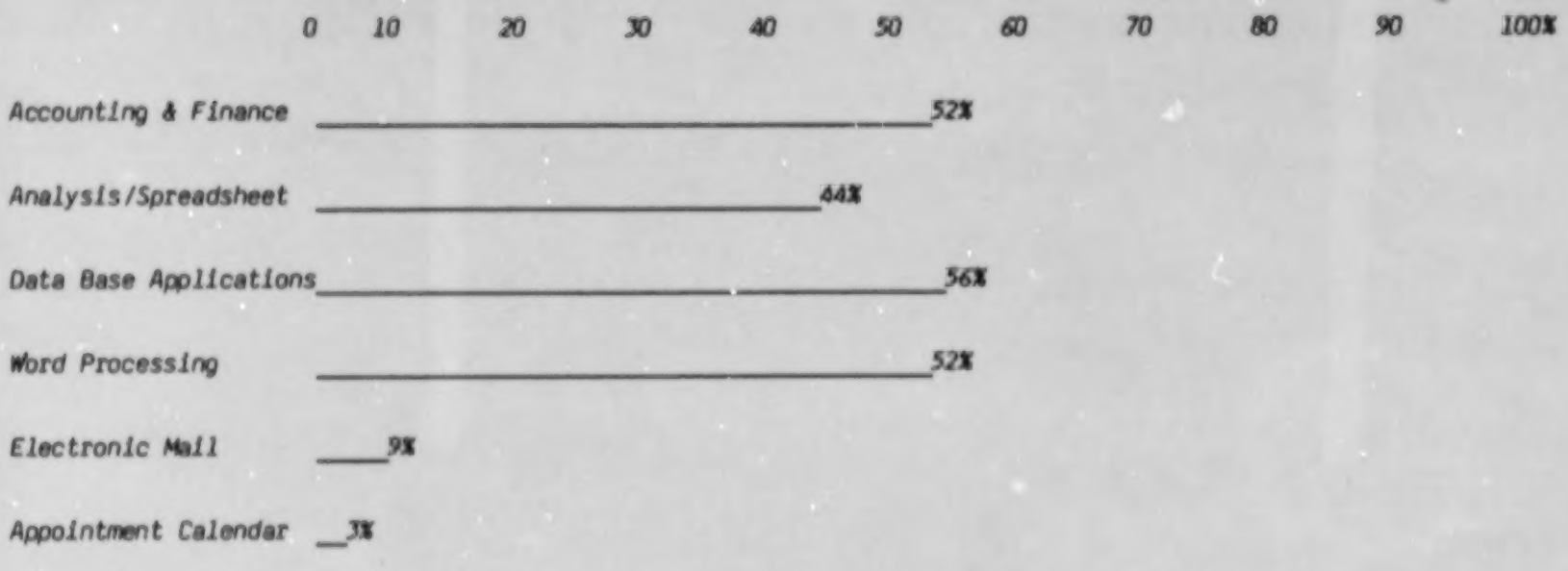
II - A - 6

Vocational-Technical Facility
Administrative Microcomputer Applications
Spring 1984
Ohio
N=50 (32% Response)



II - A -7

Vocational-Technical Facility
Administrative Microcomputer Applications
Spring 1984
Wisconsin
N=66 (34% Response)


0 10 20 30 40 50 60 70 80 90 100%
Accounting & Finance 52%
Analysis/Spreadsheet 44%
Data Base Applications 56%
Word Processing 52%
Electronic Mail 9%
Appointment Calendar 3%

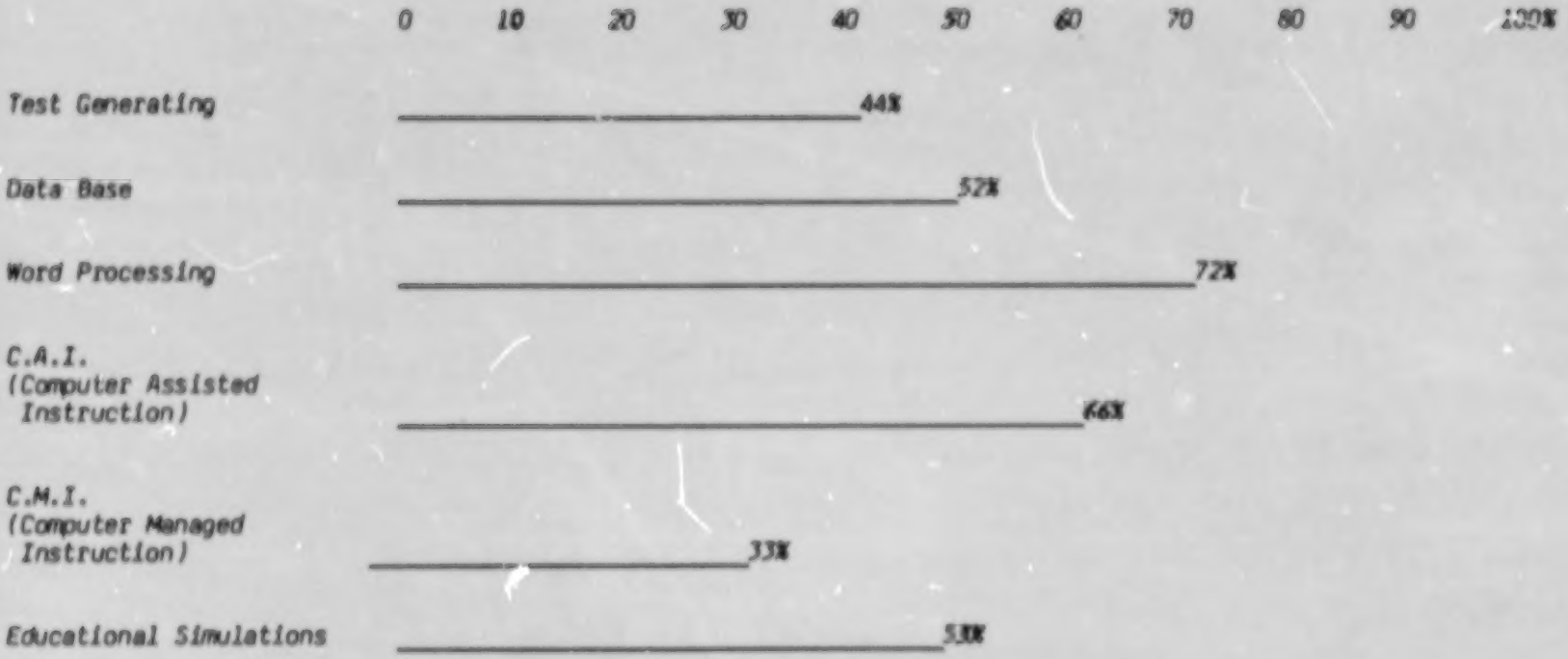
Part II

Section B

GENERAL INSTRUCTIONAL SUPPORT APPLICATIONS

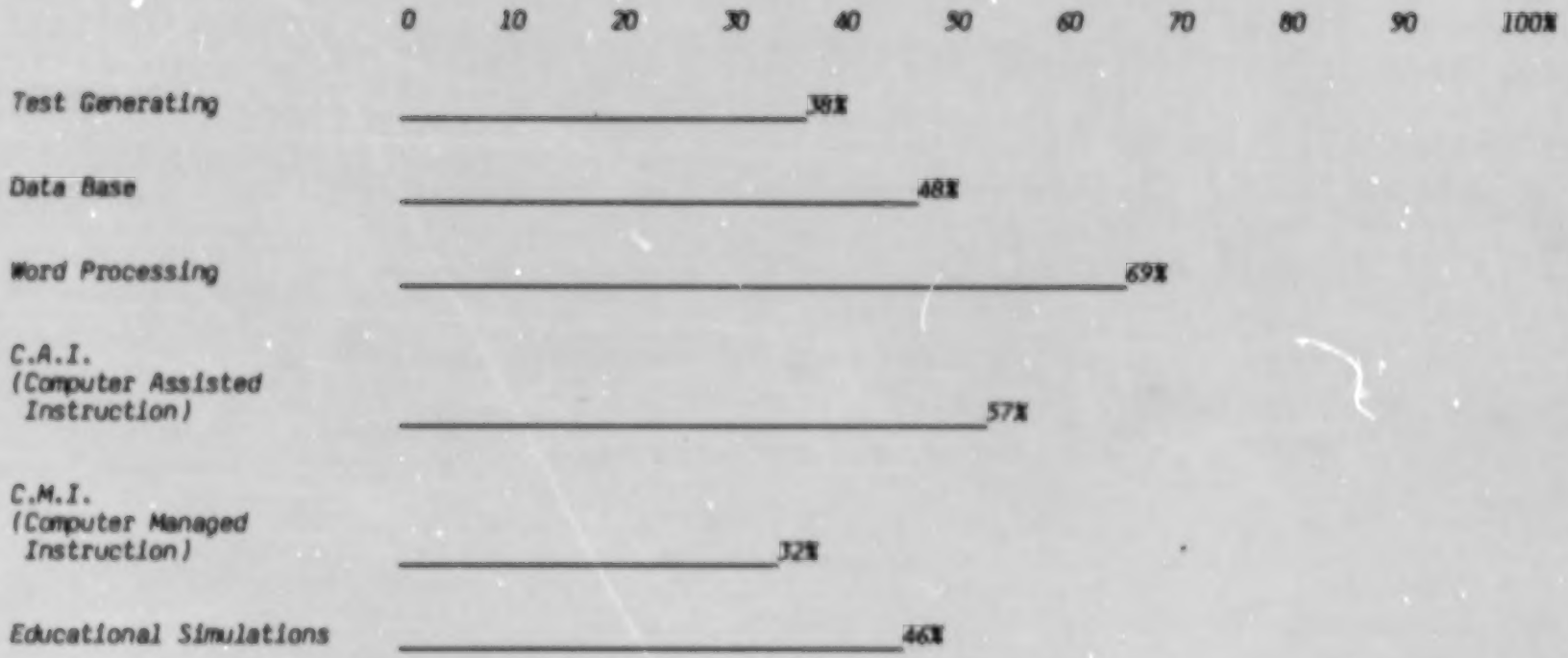
II - B - 1

Vocational-Technical Facility
Instructional Support Software Applications
Spring 1984
Michigan and Bordering States Region
N=272 (39% Response)



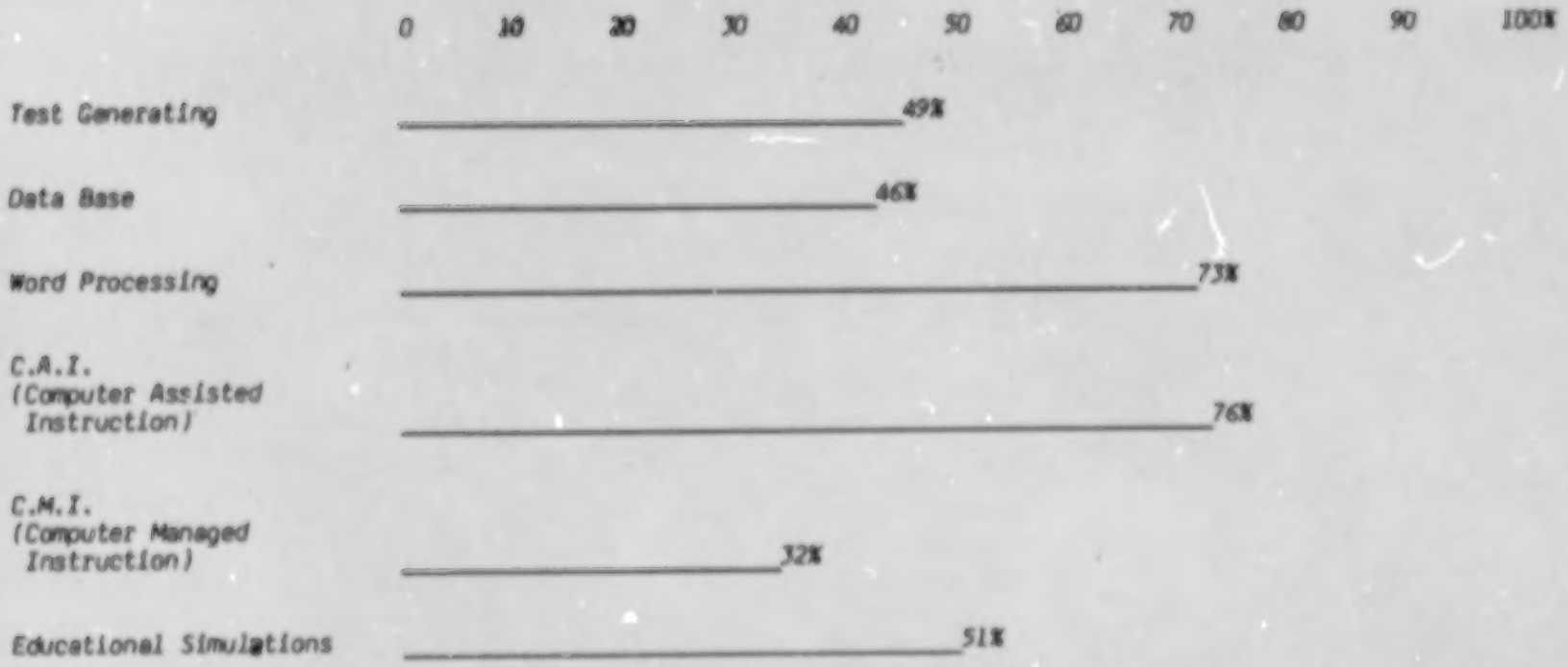
II - B - 2

Vocational-Technical Facility
Instructional Support Software Applications
Spring 1984
Michigan
N=65 (56% Response)



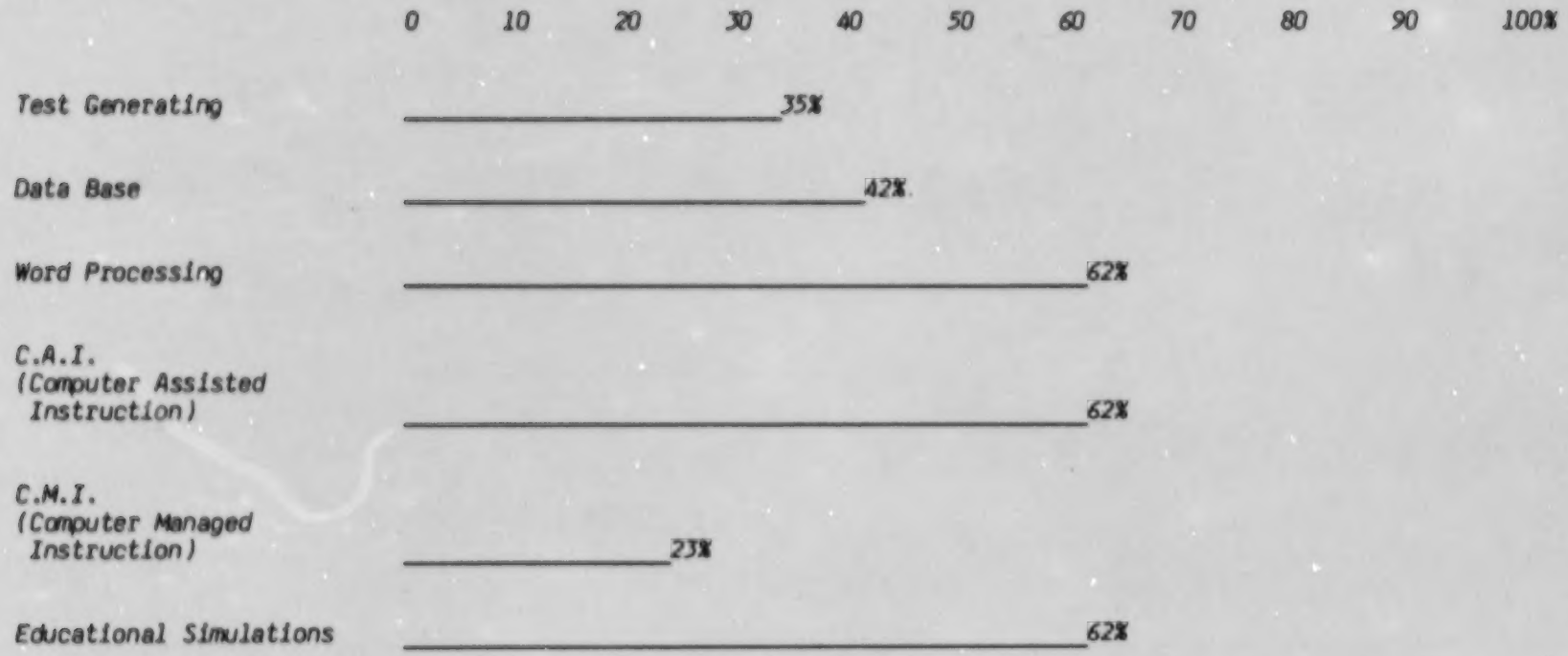
II - B - 3

Vocational-Technical Facility
Instructional Support Software Applications
Spring 1984
Illinois
N=37 (49% Response)



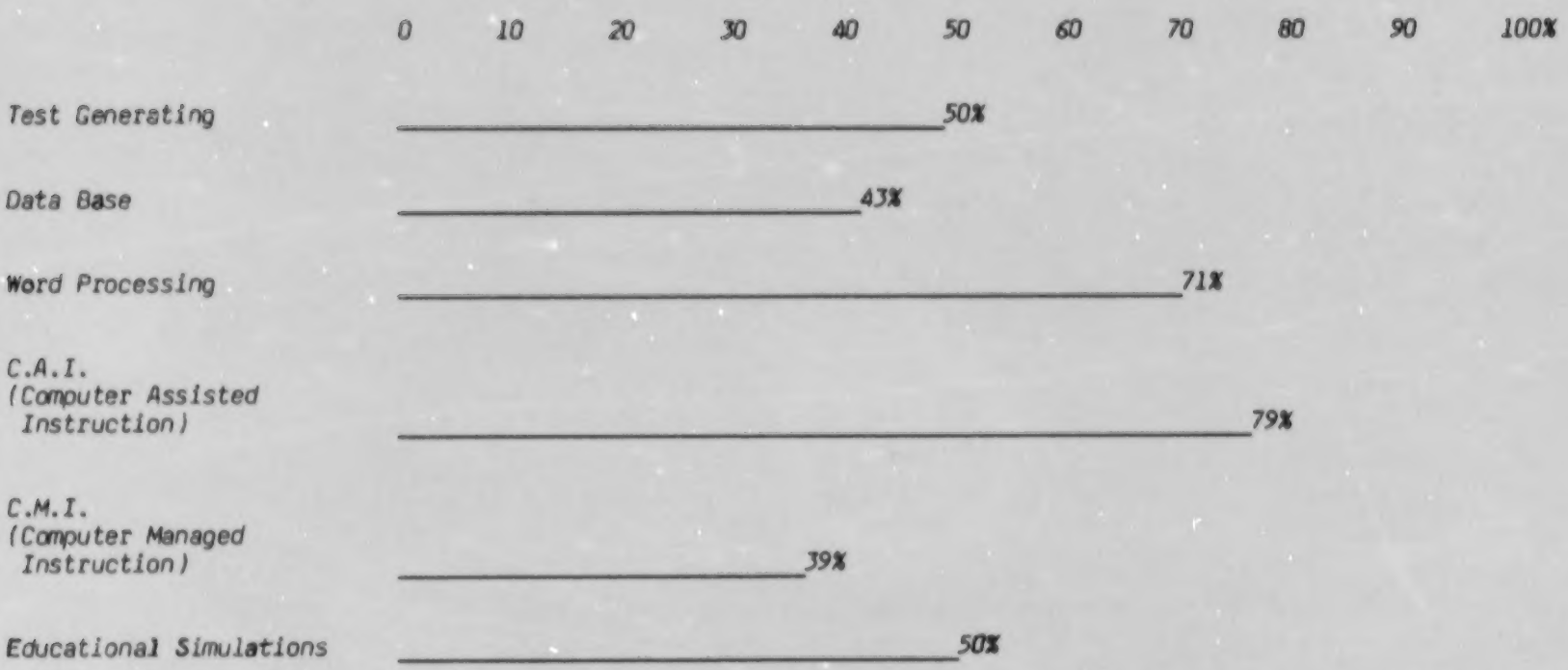
II - B - 4

Vocational-Technical Facility
Instructional Support Software Applications
Spring 1984
Indiana
N=26 (33% Response)



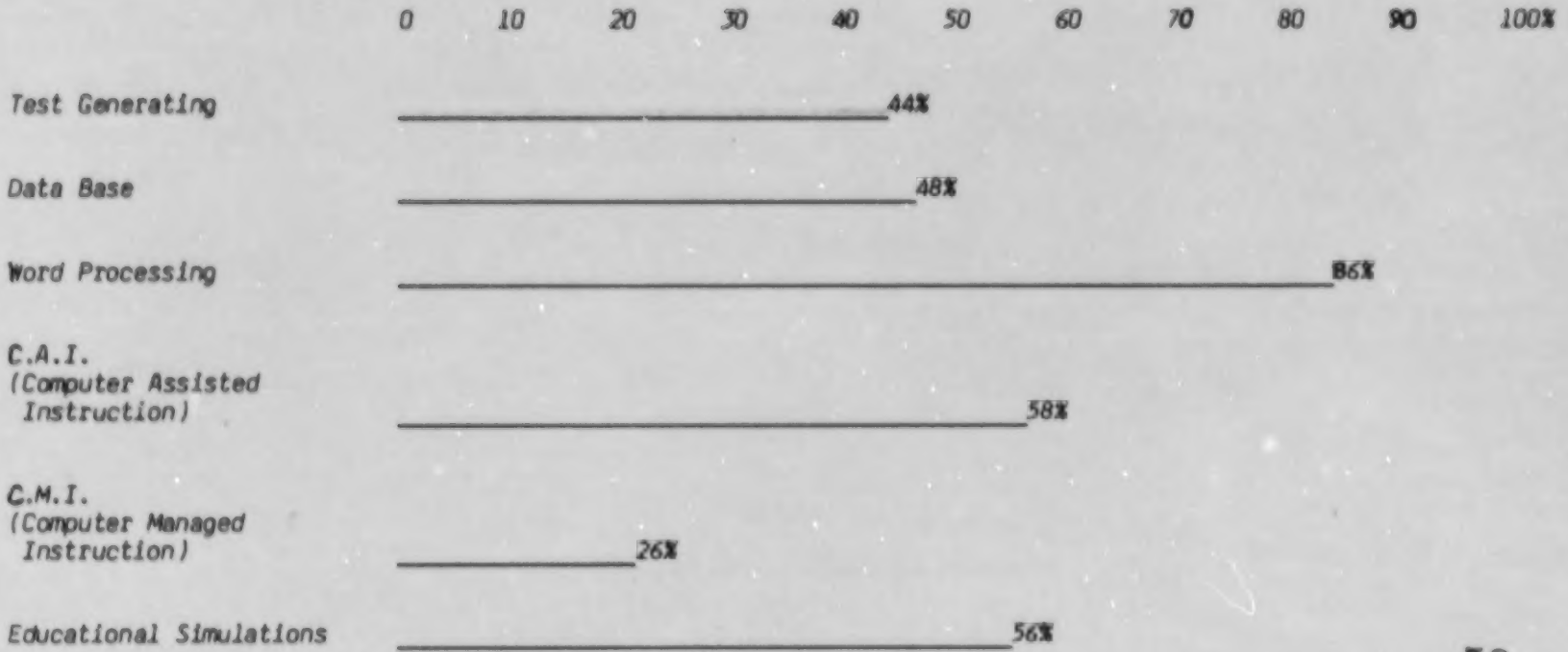
II - B - 5

Vocational-Technical Facility
Instructional Support Software Applications
Spring 1984
Minnesota
N=28 (35% Response)



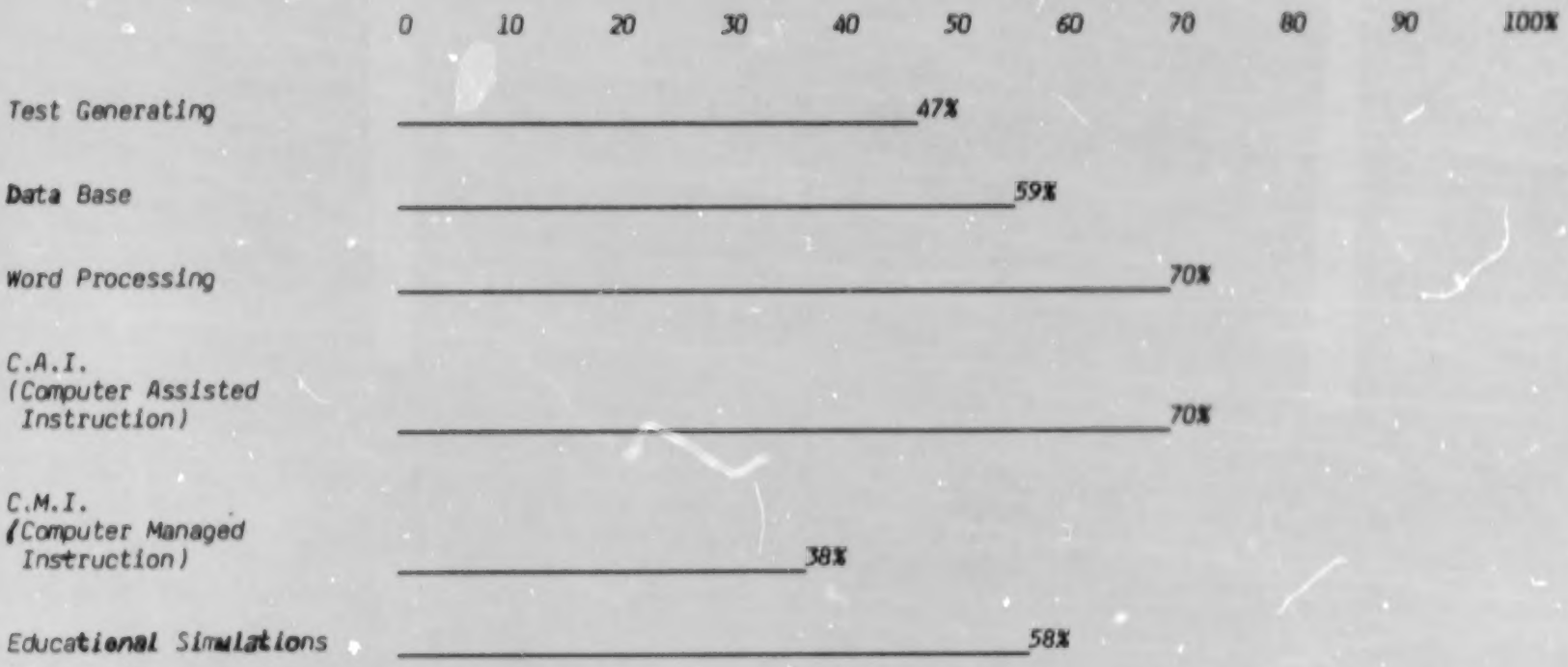
II - B - 6

Vocational-Technical Facility
Instructional Support Software Applications
Spring 1984
Ohio
N=50 (32% Response)



II - B - 7

Vocational-Technical Facility
Instructional Support Software Applications
Spring 1984
Wisconsin
N=66 (34% Response)



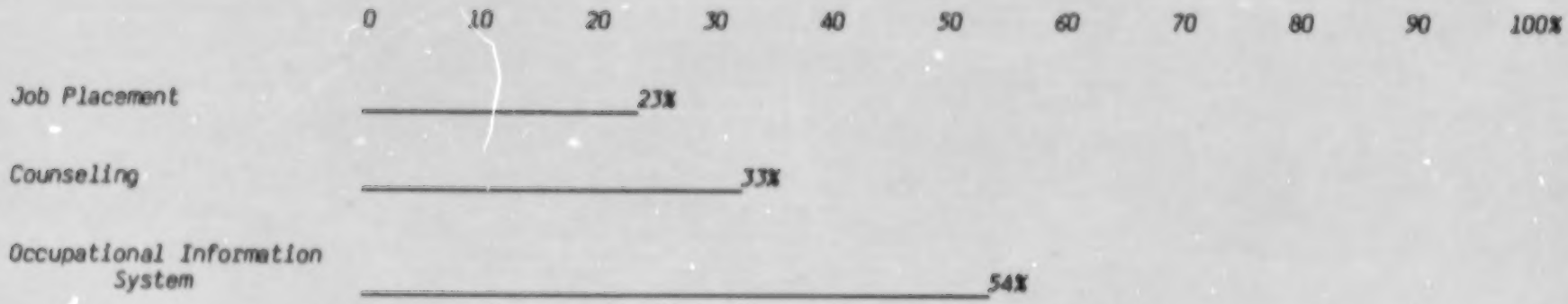
Part II

Section C

COUNSELING/JOB PLACEMENT SUPPORT APPLICATIONS

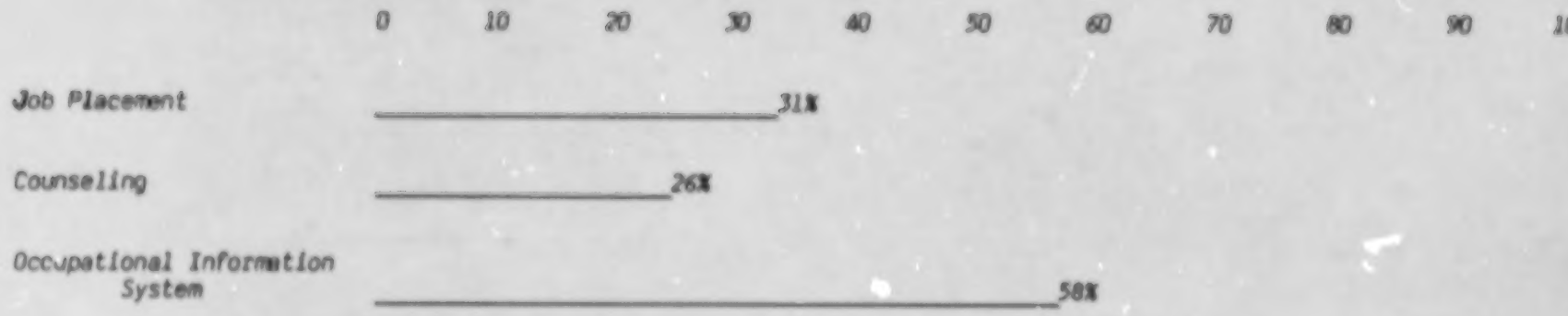
II - C -1

Vocational-Technical Facility
Counseling/Placement Software Applications
Spring 1984
Michigan and Bordering States Region
N=272 (39% Response)



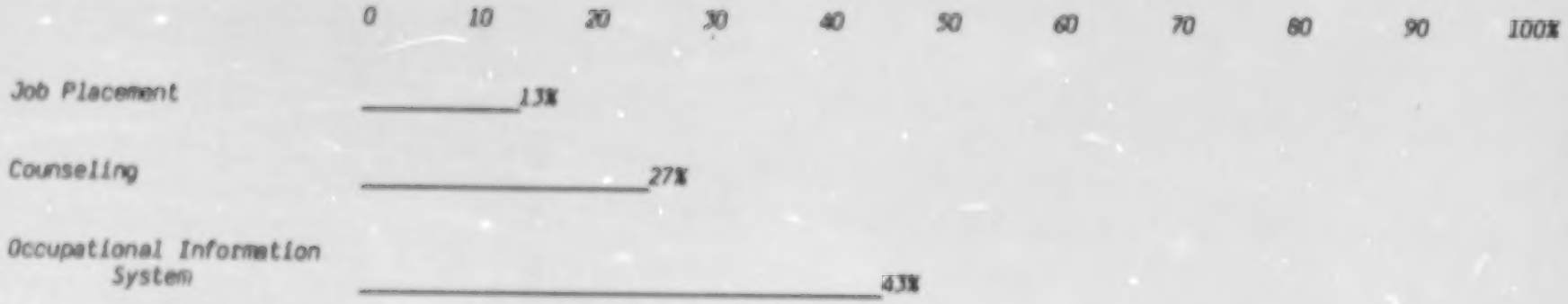
II - C - 2

Vocational-Technical Facility
Counseling/Placement Software Applications
Spring 1984
Michigan
N=65 (56% Response)



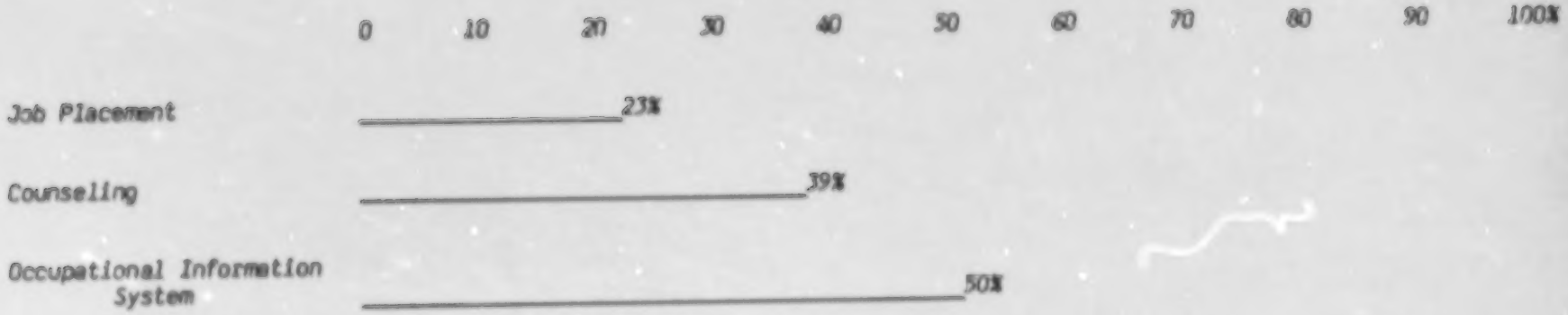
II - C - 3

Vocational-Technical Facility
Counseling/Placement Software Applications
Spring 1984
Illinois
N=37 (49% Response)



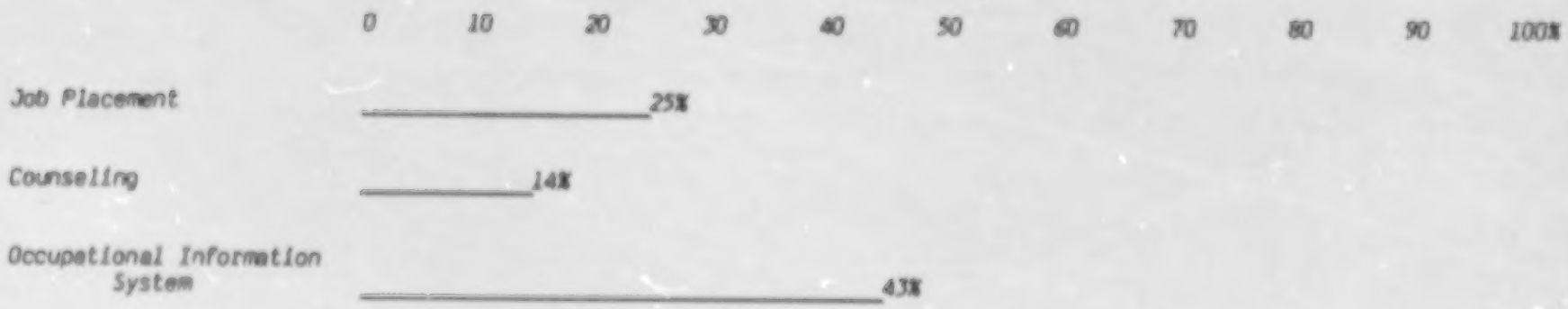
II - C - 4

Vocational-Technical Facility
Counseling/Placement Software Applications
Spring 1984
Indiana
N=26 (33% Response)



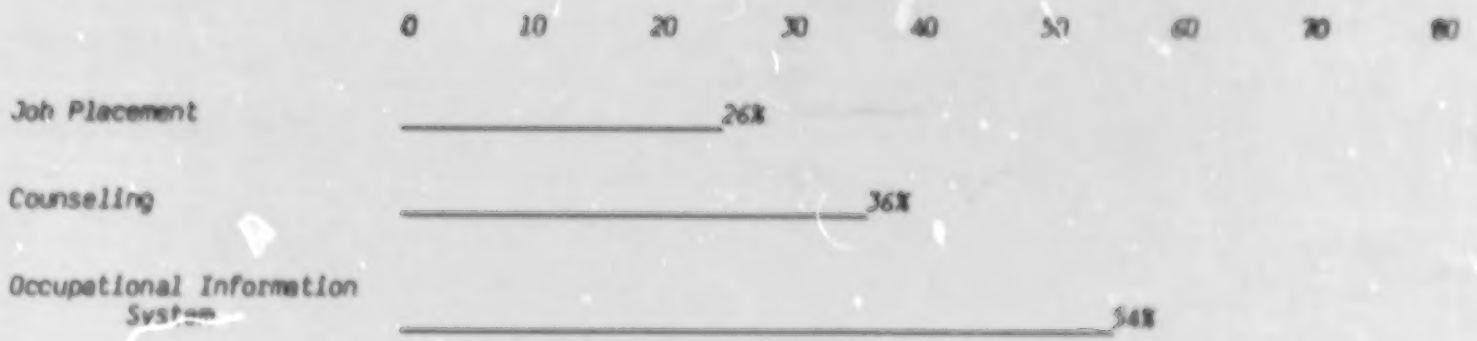
II - C - 5

Vocational-Technical Facility
Counseling/Placement Software Applications
Spring 1984
Minnesota
N=20 (35% Response)



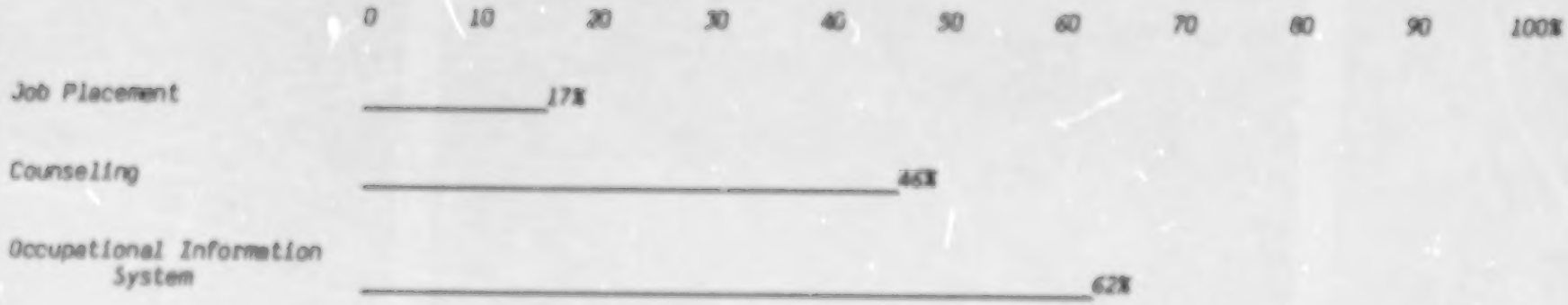
II - C - 6

Vocational-Technical Facility
Counseling/Placement Software Applications
Spring 1984
Ohio
N=50 (32% Response)



II - C - 7

Vocational-Technical Facility
Counseling/Placement Software Applications
Spring 1984
Wisconsin
N=66 (34% Response)



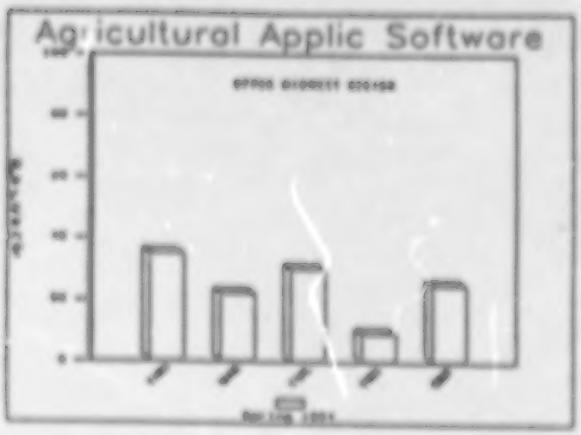
Part II

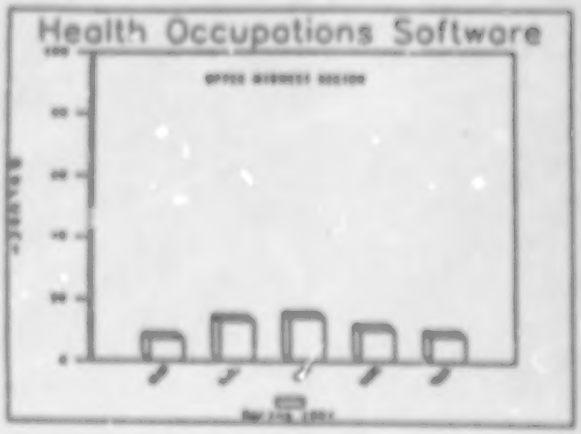
Section D

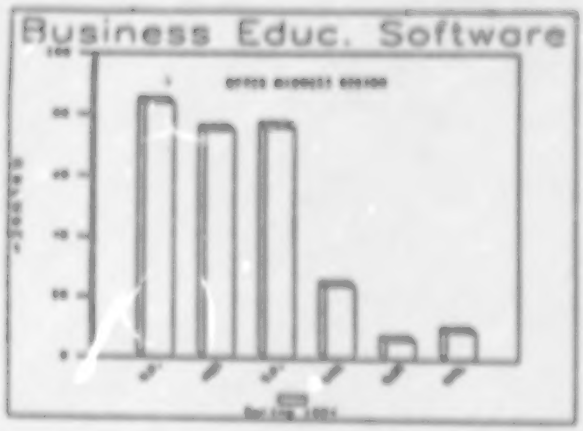
VOCATIONAL EDUCATION SERVICE GROUP
APPLICATIONS

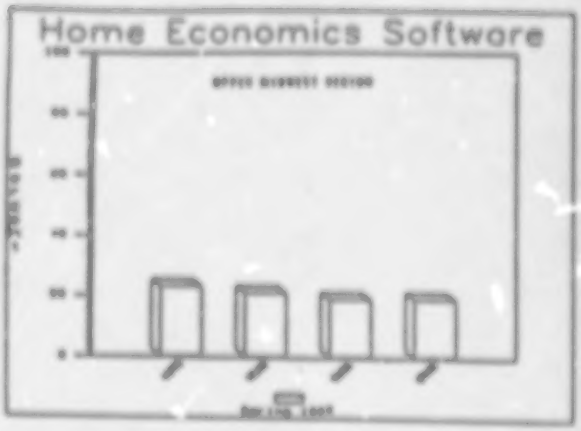
II - D - 1

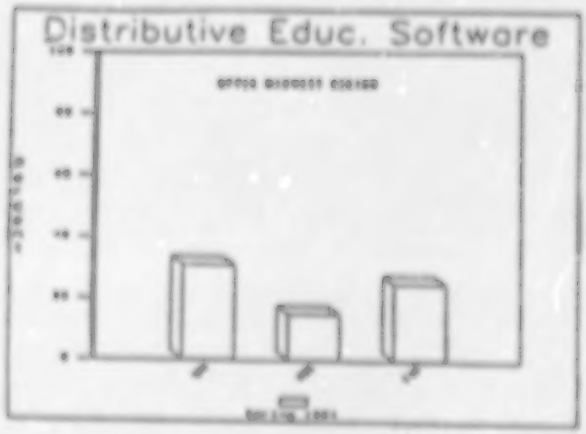
Vocational-Technical Service Group Applications
Regional Comparison of Service Group Applications
Upper Midwest Region

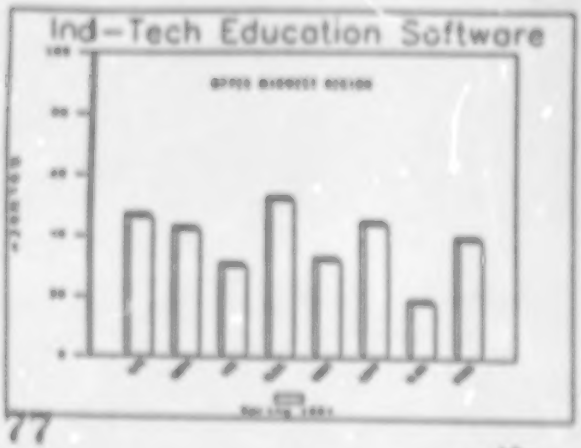


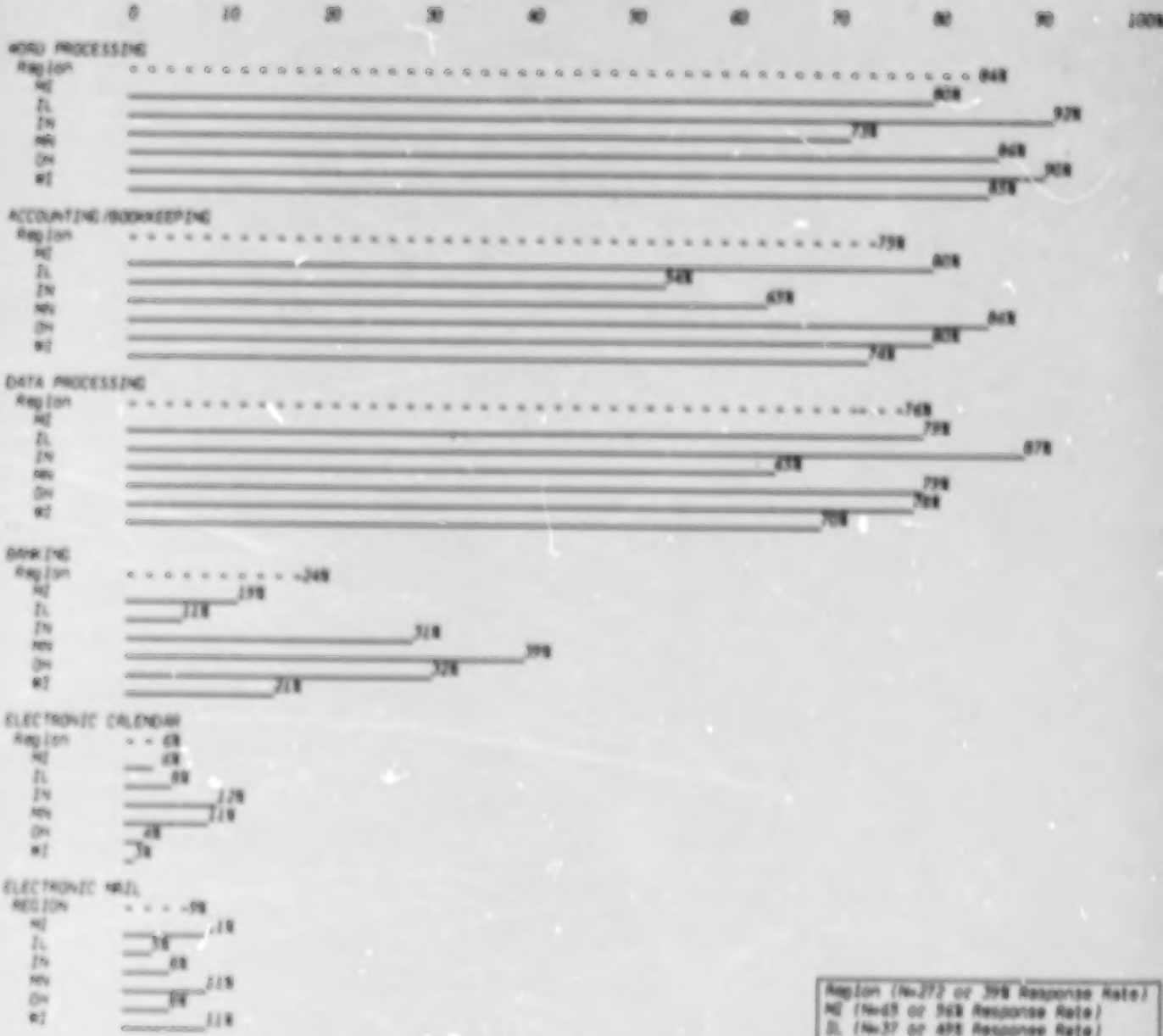
II - D - 2

Vocational-Technical Software Applications
in
Agricultural Education
Comparison of States in Upper Midwest Region

| | |
|---|---|
| Region (N=272 or 39% Response Rate) | |
| ME (N=65 or 34% Response Rate) | |
| IL (N=57 or 49% Response Rate) | |
| IN (N=26 or 33% Response Rate) | |
| MN (N=28 or 35% Response Rate) | |
| OH (N=30 or 32% Response Rate) | |
| WI (N=66 or 34% Response Rate) | |
| STATE % | |
| REGION % | |

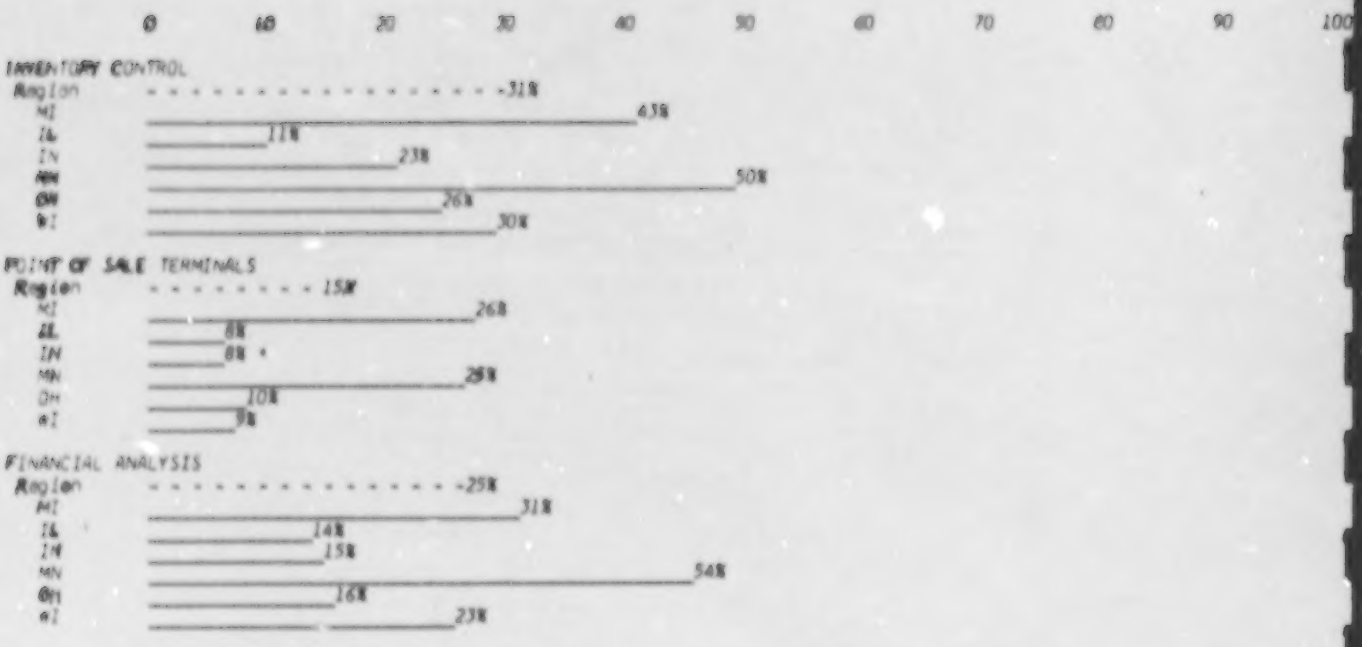
II - B - 3

Vocational-Technical Software Applications
in
Business Education
Comparison of States in Upper Midwest Region



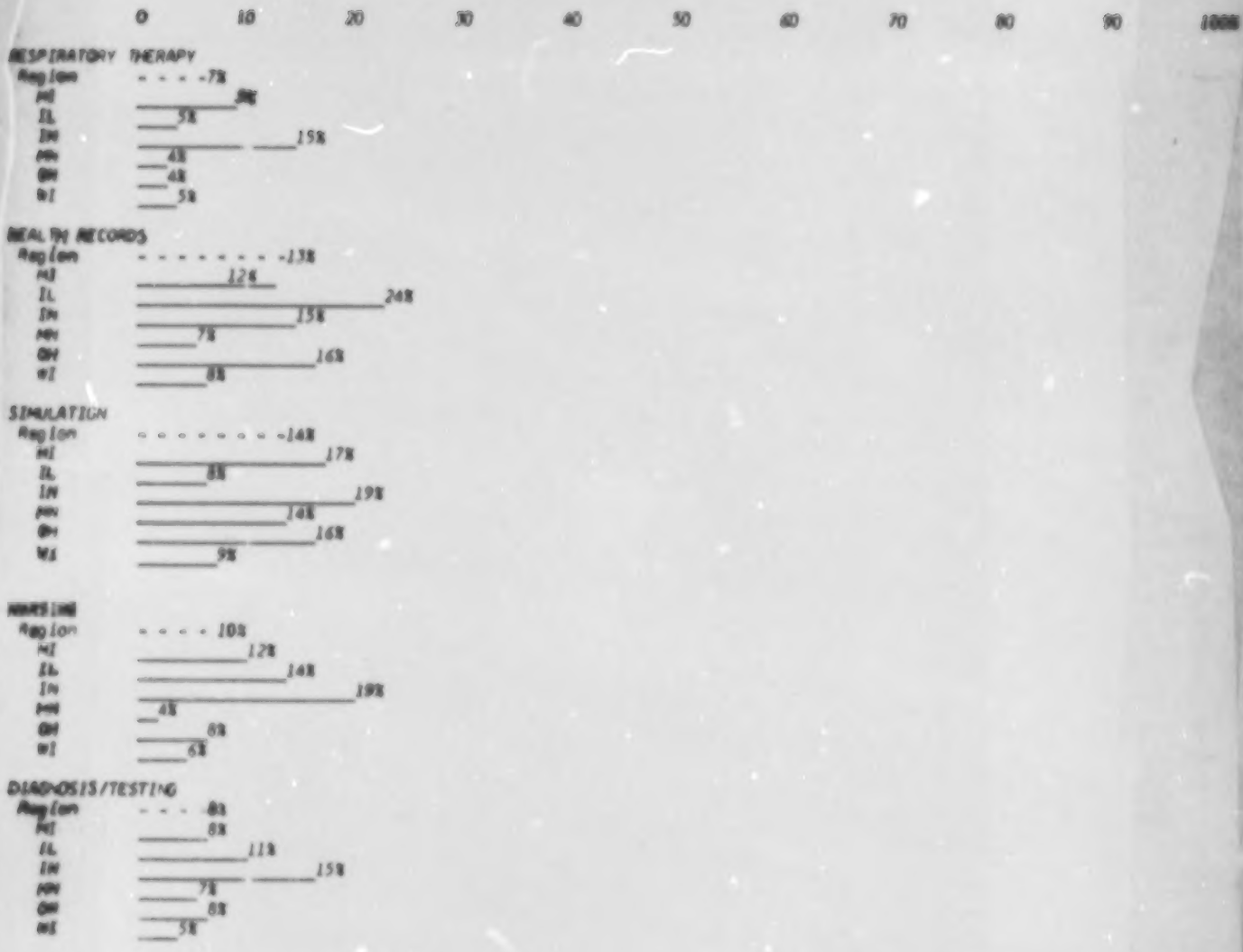

| |
|---|
| Region (N=272 or 39% Response Rate) |
| MI (N=45 or 56% Response Rate) |
| IL (N=37 or 49% Response Rate) |
| IN (N=26 or 33% Response Rate) |
| MN (N=28 or 35% Response Rate) |
| OH (N=30 or 32% Response Rate) |
| WI (N=66 or 34% Response Rate) |
| STATE % |
| REGION % |

Vocational-Technical Software Applications
In
Distributive Education
Comparison of States in Upper Midwest Region




| |
|---|
| Region (N=272 or 39% Response Rate |
| MI (N=65 or 56% Response Rate) |
| IL (N=37 or 49% Response Rate) |
| IN (N=26 or 33% Response Rate) |
| MN (N=28 or 35% Response Rate) |
| OH (N=50 or 32% Response Rate) |
| WI (N=66 or 34% Response Rate) |
| STATE % |
| REGION % |

Vocational-Technical Software Applications
In
Health Occupations
Comparison of States in Upper Midwest Region




| |
|---|
| Region (N=272 or 39% Response Rate) |
| MI (N=65 or 56% Response Rate) |
| IL (N=37 or 49% Response Rate) |
| IN (N=26 or 33% Response Rate) |
| MN (N=28 or 35% Response Rate) |
| OH (N=50 or 32% Response Rate) |
| WI (N=66 or 34% Response Rate) |
| STATE % |
| REGION % |



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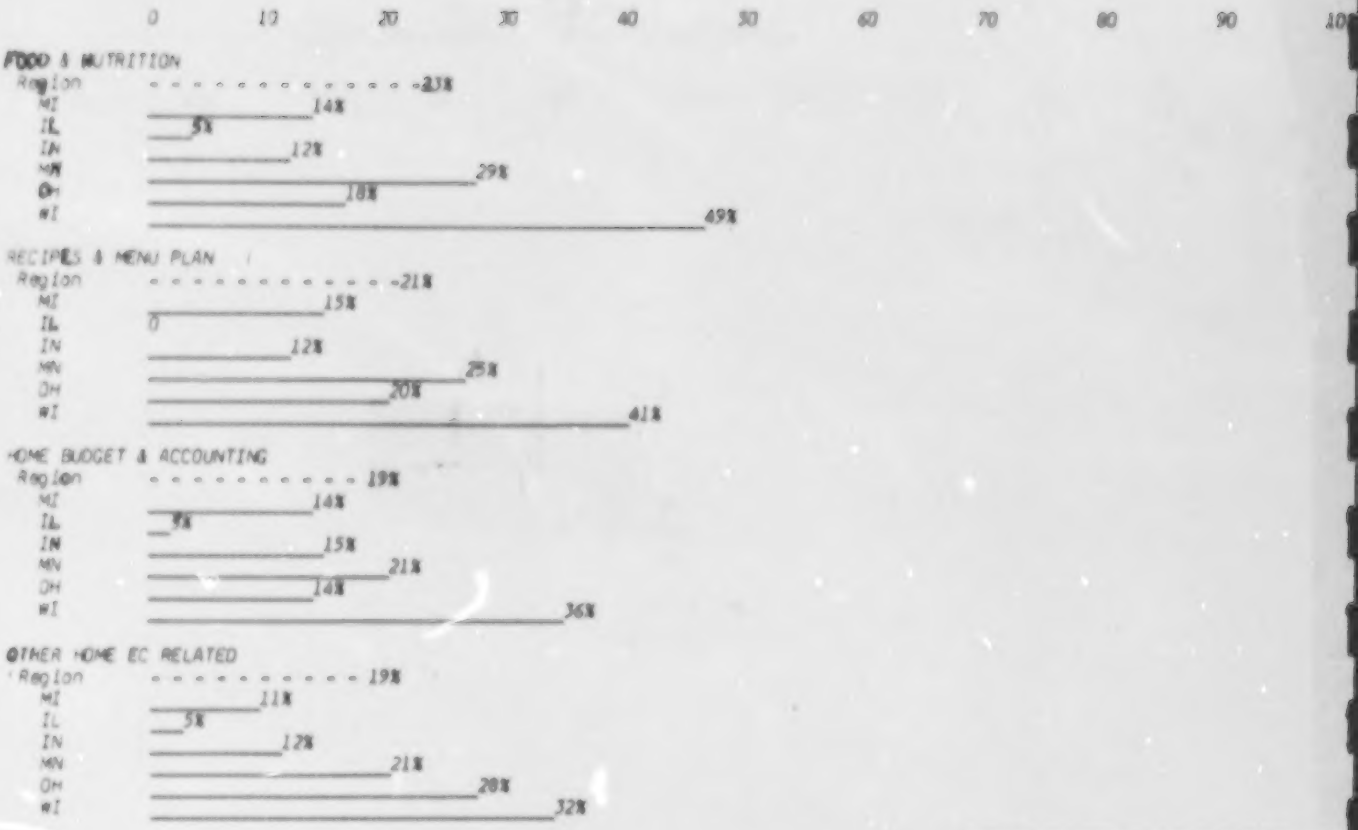
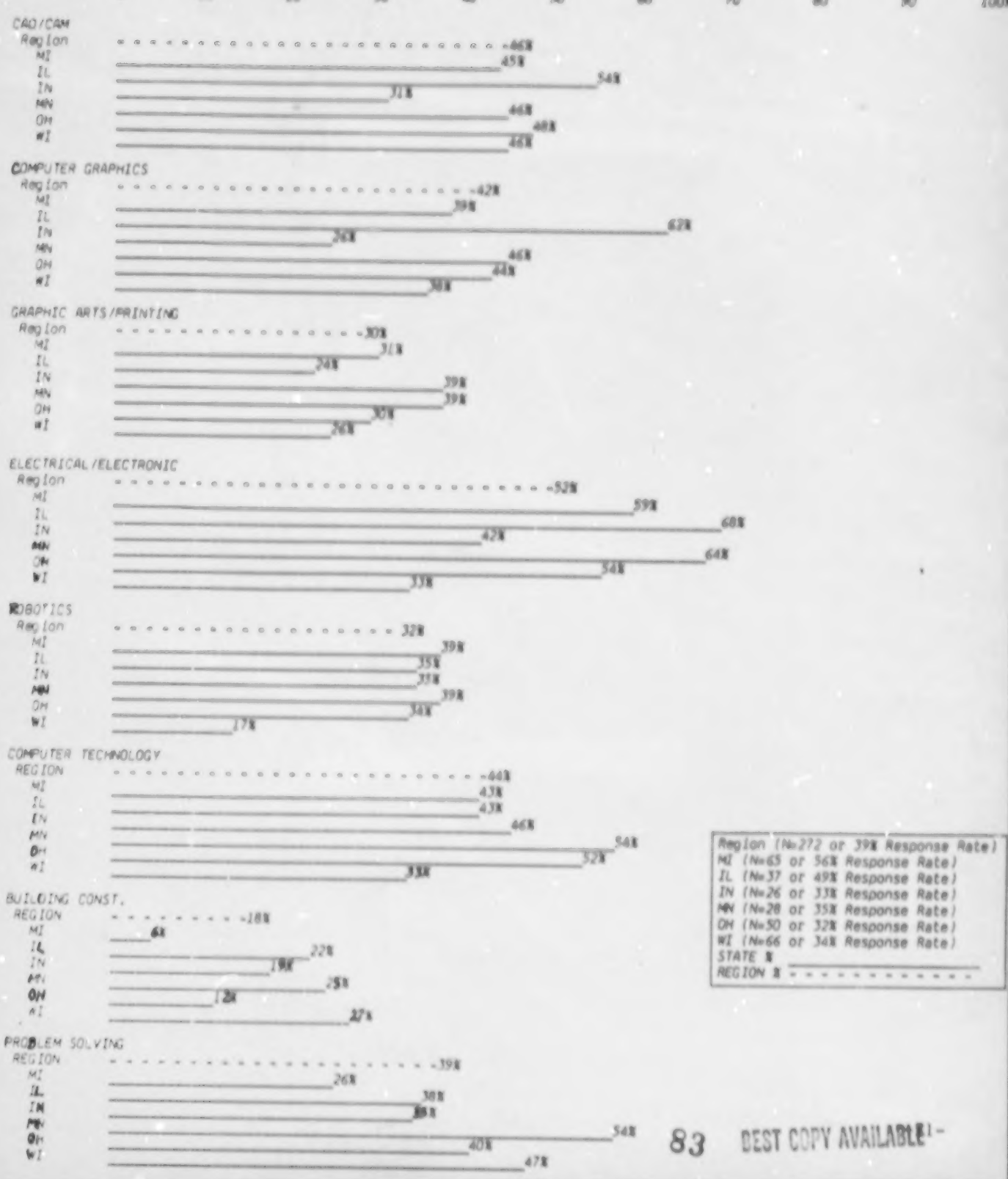
Vocational-Technical Software Applications
In
Home Economics
Comparison of States in Upper Midwest Region




| |
|---|
| Region (N=272 or 39% Response Rate |
| MI (N=65 or 56% Response Rate) |
| IL (N=37 or 49% Response Rate) |
| IN (N=26 or 33% Response Rate) |
| MN (N=28 or 35% Response Rate) |
| OH (N=50 or 32% Response Rate) |
| WI (N=66 or 34% Response Rate) |
| STATE % _____ |
| REGION % - - - - - - - - - - - - |

# Vocational-Technical Software Applications
## In
## Industrial-Technical Education
## Comparison of States in Upper Midwest Region


0 10 20 30 40 50 60 70 80 90 100%
CAD/CAM
Region - - - - - - - - - - - - - - - - - - - - - - - - - - - - -46%
MI 45%
IL 54%
IN 31%
MN 44%
OH 48%
WI 44%
COMPUTER GRAPHICS
Region - - - - - - - - - - - - - - - - - - - - - - - - -42%
MI 39%
IL 62%
IN 26%
MN 44%
OH 41%
WI 38%
GRAPHIC ARTS/PRINTING
Region - - - - - - - - - - - - - - - - - -30%
MI 31%
IL 24%
IN 39%
MN 39%
OH 30%
WI 26%
ELECTRICAL/ELECTRONIC
Region - - - - - - - - - - - - - - - - - - - - - - - - - - - - -52%
MI 59%
IL 68%
IN 42%
MN 64%
OH 54%
WI 33%
ROBOTICS
Region - - - - - - - - - - - - - - - - - - - - 32%
MI 39%
IL 35%
IN 35%
MN 39%
OH 34%
WI 17%
COMPUTER TECHNOLOGY
REGION - - - - - - - - - - - - - - - - - - - - - - - - -44%
MI 43%
IL 43%
IN 46%
MN 54%
OH 52%
WI 33%
BUILDING CONST.
REGION - - - - - - - - -18%
MI 6%
IL 22%
IN 19%
MN 25%
OH 12%
WI 27%
PROBLEM SOLVING
REGION - - - - - - - - - - - - - - - - - - - - - -39%
MI 26%
IL 30%
IN 33%
MN 54%
OH 40%
WI 47%

| |
|---|
| Region (N=272 or 39% Response Rate) |
| MI (N=65 or 56% Response Rate) |
| IL (N=37 or 49% Response Rate) |
| IN (N=26 or 33% Response Rate) |
| MN (N=28 or 35% Response Rate) |
| OH (N=50 or 32% Response Rate) |
| WI (N=66 or 34% Response Rate) |
| STATE % |
| REGION % - - - - - - - - - - - - |



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## Part III

## FINDINGS AND RECOMMENDATIONS

## General Findings

-Apple/Apple Compatible, IBM-PC/IBM Compatible and Radio Shack microcomputers dominate the inventories in voc-tech facilities for those states surveyed. A sizeable number of Commodore units are also on inventory in MI, IL, OH, and WI. However, relatively few are identified as planned future acquisitions.

-Michigan, Illinois and Ohio reported a significant amount of existing and planned acquisition of microcomputers other than the eight categories included in the survey.

Note: Michigan reported twenty nine different models on inventory in a 1983 study. However, the top ranking manufacturers by amount and facility distribution were Apple, Radio Shack and IBM. Radio Shack and IBM exchanged positions, as predicted from the 1983 investigation.

-A moderate overall percentage of facilities indicated having microcomputers communicating to a mainframe. Wisconsin and Ohio has the most activity while Indiana and Minnesota has the least.

-Local area networking is being utilized or under consideration to a significant extent in every state. While current utilization is generally on the low side, it is evident that much implementation is in the discussion/planning stage.

-There is a significant amount of administrative software application activity in Accounting/Finance, Analysis Spreadsheet, Data Base Applications and Word Processing in every state surveyed. However, there is very little activity in Electronic Mail and Electronic Appointment Calendar applications.

-Activity in all areas of instructional support was identified. Most of the activity appears in Word Processing and Computer Assisted Instruction (C.A.I.). The least amount of activity was noted in Computer Managed Instruction (C.M.I.).

-Strong activity is apparent in all three areas of Counseling/Placement identified on the questionnaire. Most of the applications are related to Occupational Information Systems while the least is in Job Placement with the exception of Michigan and Minnesota which illustrates the least amount of activity in Counseling.

-A significant amount of overall activity is apparent for all vocational-technical education service groups. However, there is extreme variation among states for a number of sub-topics listed. Also, half of the sub-topics listed for Business Education appeared relatively weak. This was rather surprising because of the high degree of microcomputer activity in Business Education programming.

-Software applications in Health Occupations is less than applications in each of the other vocational-technical service groups.

-Industrial-Technical and Business Education software applications dominate all other vocational-technical service groups. While Business Education applications are dominated by three sub-topics, Industrial-Technical applications appear relatively strong for all eight sub-topics identified on the questionnaire.

-Overall, there is a great deal of consistency among these states with respect to Hardware Inventories and Software Applications.

## Recommendations

-There is an immediate and continuing need to insure a high level of computer literacy and user oriented application skills for all vocational-technical, counselors, teachers and administrators. It is recommended that both pre-service and in-service instructional programming be developed to service this need.

-The wide array of different computers currently on inventory will probably diminish to relatively few manufacturers or those that are designed to be compatible to these few. Therefore, a review of planned applications is important prior to increasing current inventories of non-compatible items

-Strong consideration and investigation of the value of Local Area Networking should be taken by both the individual and the institution. There appears to be a strong and growing trend to L.A.N. linkages with a variety of combinations in each of the states surveyed.

-Establishment of state and regional information centers to share information with respect to microcomputer hardware and software is recommended. The data suggests a significant amount of consistency between states for most items queried. Therefore, sharing related information such as appropriate software, maintenance/repair, training needs etc. would help provide efficient solutions to solving many emerging problems.

-It is recommended that this type of survey be continued on an annual basis until it is apparent that hardware inventories and software applications for public voc-tech facilities have reached a plateau of growth and development.

APPENDICES

## INDEX TO APPENDICES


| | Exhibits |
|---|---|
| - Hardware Questionnaire | A |
| - Software Questionnaire | B |
| - Inventory Tables - Regional | |
| --Current | C |
| --Planned | D |
| -Inventory Tables - State | |
| --Michigan | |
| Current | E |
| Planned | F |
| --Illinois | |
| Current | G |
| Planned | H |
| --Indiana | |
| Current | I |
| Planned | J |
| --Minnesota | |
| Current | K |
| Planned | L |
| --Ohio | |
| Current | M |
| Planned | N |
| --Wisconsin | |
| Current | O |
| Planned | P |
| - Networking Tables - Regional | Q |
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| --Michigan- | R |
| --Illinois- | S |
| --Indiana - | T |
| --Minnesota | U |
| --Ohio- | V |
| --Wisconsin | W |

Software Applications Table (Part 1)

| | |
|---|---|
| - Administrative, Instructional Support and Counseling/Job Placement Support Applications Table for Region and States (MI, IL, IN, MN, OH, and WI)- | X |

Software Applications Table (Part 2)

| | |
|---|---|
| - Vocational-Technical Service Group Applications Table for Region States (MI, IL, IN, MN, OH, and WI)- | Y |

SURVEY QUESTIONNAIRE

Use of Microcomputers in Vocational-Technical Education Facilities

HARDWARE INFORMATION

(Please make responses on Side 1 (RED) of enclosed answer sheet)

TOPIC: Current Inventory of Microcomputers

Please mark the appropriate O for type and amount of microcomputers currently on inventory in your facility. (Questions 1 thru 9)

A = none
B = 1 to 10
C = 11 to 20
D = 21 to 30
E = more than 30

1. Apple microcomputers (all models) - - -

SURVEY QUESTIONNAIRE

Use of Microcomputers in Vocational-Technical Education Facilities

**SOFTWARE INFORMATION**

**(Please make responses on Side 2 (GREEN) of enclosed answer sheet)**

TOPIC: Software Applications

Please indicate which microcomputer applications you are using (A = yes, B = No).

51. Administrative Accounting and Finance - - -

CURRENT INVENTORY TABLES

Estimated Microcomputer Hardware
for
Respondents Voc-Tech Facilities
Michigan and Bordering States
(39% response from 705 mailings)

Current Inventory - Apple
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 8 | 2.94 |
| 0 | 39 | 14.34 |
| 1 to 10 | 120 | 44.12 |
| 11 to 20 | 52 | 19.12 |
| 21 to 30 | 24 | 8.82 |
| 30 & up | 29 | 10.66 |
| Est Total | 3108 | |

Current Inventory - Radio Shack
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 16 | 5.88 |
| 0 | 121 | 44.49 |
| 1 to 10 | 85 | 31.25 |
| 11 to 20 | 22 | 8.09 |
| 21 to 30 | 12 | 4.41 |
| 30 & up | 16 | 5.88 |
| Est Total | 1481 | |

Current Inventory - IBM
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 17 | 6.25 |
| 0 | 136 | 50.00 |
| 1 to 10 | 73 | 26.84 |
| 11 to 20 | 21 | 7.72 |
| 21 to 30 | 12 | 4.41 |
| 30 & up | 13 | 4.78 |
| Est Total | 1095 | |

Current Inventory - Apple Compatible
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 17 | 6.25 |
| 0 | 195 | 71.69 |
| 1 to 10 | 50 | 18.38 |
| 11 to 20 | 2 | 0.74 |
| 21 to 30 | 3 | 1.10 |
| 30 & up | 5 | 1.84 |
| Est Total | 540 | |

Current Inventory - IBM Compatible
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 20 | 7.35 |
| 0 | 213 | 78.31 |
| 1 to 10 | 29 | 10.66 |
| 11 to 20 | 3 | 1.10 |
| 21 to 30 | 4 | 1.47 |
| 30 & up | 3 | 1.10 |
| Est Total | 415 | |

Current Inventory - Atari
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 20 | 7.35 |
| 0 | 219 | 80.51 |
| 1 to 10 | 26 | 9.56 |
| 11 to 20 | 4 | 1.47 |
| 21 to 30 | 3 | 1.10 |
| 30 & up | 0 | 0.00 |

Current Inventory - Blackhawk
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 19 | 6.99 |
| 0 | 201 | 73.90 |
| 1 to 10 | 12 | 4.41 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 66 | |

Current Inventory - Commodore
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 19 | 6.99 |
| 0 | 181 | 66.54 |
| 1 to 10 | 42 | 15.44 |
| 11 to 20 | 20 | 7.35 |
| 21 to 30 | 5 | 1.84 |
| 30 & up | 5 | 1.84 |
| Est Total | 946 | |

Current Inventory - Other
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 17 | 6.25 |
| 0 | 144 | 52.94 |
| 1 to 10 | 82 | 30.15 |
| 11 to 20 | 15 | 5.51 |
| 21 to 30 | 10 | 3.68 |
| 30 & up | 4 | 1.47 |
| Est Total | 1081 | |

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## PLANNED ADDITIONAL INVENTORY TABLES

### Estimated Microcomputer Hardware for Respondents Voc-Tech Facilities Michigan and Bordering States (39% response from 705 mailings)

Planned Inventory - Apple
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 13 | 4.78 |
| 0 | 101 | 37.13 |
| 1 to 10 | 124 | 45.59 |
| 11 to 20 | 24 | 8.82 |
| 21 to 30 | 7 | 2.57 |
| 30 & up | 3 | 1.10 |
| Est Total | 1139 | |

Planned Inventory - Apple Stock
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 16 | 5.88 |
| 0 | 197 | 72.43 |
| 1 to 10 | 54 | 19.85 |
| 11 to 20 | 2 | 0.74 |
| 21 to 30 | 1 | 0.37 |
| 30 & up | 2 | 0.74 |
| Est Total | 425 | |

Planned Inventory - IBM PC
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 17 | 6.25 |
| 0 | 138 | 50.74 |
| 1 to 10 | 72 | 26.47 |
| 11 to 20 | 27 | 9.93 |
| 21 to 30 | 15 | 5.51 |
| 30 & up | 3 | 1.10 |
| Est Total | 1304 | |

Planned Inventory - Apple Compatible
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 19 | 6.99 |
| 0 | 221 | 81.25 |
| 1 to 10 | 27 | 9.93 |
| 11 to 20 | 4 | 1.47 |
| 21 to 30 | 1 | 0.37 |
| 30 & up | 0 | 0.10 |
| Est Total | 236 | |

Planned Inventory - IBM Compatible
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 19 | 6.99 |
| 0 | 234 | 87.85 |
| 1 to 10 | 23 | 8.46 |
| 11 to 20 | 3 | 1.10 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 3 | 1.10 |
| Est Total | 280 | |

Planned Inventory - Atari
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 19 | 6.99 |
| 0 | 250 | 91.91 |
| 1 to 10 | 3 | 1.10 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 17 | |

Planned Inventory - Blackhawk
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 21 | 7.72 |
| 0 | 251 | 92.28 |
| 1 to 10 | 0 | 0.00 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 0 | |

Planned Inventory - Commodore
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 20 | 7.35 |
| 0 | 225 | 82.72 |
| 1 to 10 | 24 | 8.82 |
| 11 to 20 | 3 | 1.10 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 179 | |

Planned Inventory - Other
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 20 | 7.35 |
| 0 | 201 | 73.90 |
| 1 to 10 | 38 | 13.97 |
| 11 to 20 | 9 | 3.31 |
| 21 to 30 | 1 | 0.37 |
| 30 & up | 3 | 1.10 |
| Est Total | 481 | |

## CURRENT INVENTORY TABLES

### Estimated Microcomputer Hardware for Michigan Respondents Voc-Tech Facilities (56% response from 117 mailings)

Current Inventory - Apple
Michigan Voc-Tech Facilities

N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 4 | 6.15 |
| None | 9 | 13.85 |
| 1 to 10 | 31 | 47.69 |
| 11 to 20 | 12 | 18.46 |
| 21 to 30 | 4 | 6.15 |
| 30 & up | 5 | 7.69 |

Est Total 636

Current Inventory - Radio Shack
Michigan Voc-Tech Facilities

N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 5 | 7.69 |
| None | 29 | 44.62 |
| 1 to 10 | 17 | 26.15 |
| 11 to 20 | 4 | 6.15 |
| 21 to 30 | 4 | 6.15 |
| 30 & up | 6 | 9.23 |

Est Total 471

Current Inventory - IBM PC
Michigan Voc-Tech Facilities

N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 7 | 10.77 |
| None | 32 | 49.23 |
| 1 to 10 | 13 | 20.00 |
| 11 to 20 | 8 | 12.31 |
| 21 to 30 | 2 | 3.08 |
| 30 & up | 3 | 4.62 |

Est Total 353

Current Inventory - Apple Compatibles
Michigan Voc-Tech Facilities

N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 6 | 9.23 |
| None | 47 | 72.31 |
| 1 to 10 | 12 | 18.46 |
| 11 to 2 | 0 | 0.00 |
| 21 to 3 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |

Est Total 66

Current Inventory - IBM Compatibl
Michigan Voc-Tech Facilities

N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 7 | 10.77 |
| None | 51 | 78.46 |
| 1 to 10 | 5 | 7.69 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 2 | 3.08 |
| 30 & up | 0 | 0.00 |

Est Total 79

Current Inventory - Atari
Michigan Voc-Tech Facilities

N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 9 | 13.85 |
| None | 50 | 76.92 |
| 1 to 10 | 6 | 9.23 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |

Est Total 33

Current Inventory - Blackhawk
Michigan Voc-Tech Facilities

N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 8 | 12.31 |
| None | 49 | 75.38 |
| 1 to 10 | 8 | 12.31 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |

Est Total 44

Current Inventory - Commodore
Michigan Voc-Tech Facilities

N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 7 | 10.77 |
| None | 42 | 64.62 |
| 1 to 10 | 7 | 10.77 |
| 11 to 20 | 6 | 9.23 |
| 21 to 30 | 1 | 1.54 |
| 30 & up | 2 | 3.08 |

Est Total 228

Current Inventory - All Other Brands
Michigan Voc-Tech Facilities

N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 6 | 9.23 |
| 0 | 30 | 46.15 |
| 1 to 10 | 19 | 29.23 |
| 11 to 20 | 6 | 9.23 |
| 21 to 30 | 3 | 4.62 |
| 30 & up | 1 | 1.54 |

Est Total 310

## PLANNED ADDITIONAL INVENTORY TABLES

### Estimated Microcomputer Hardware for Michigan Respondent Voc-Tech Facilities (56% response from 117 mailings)

Planned Inventory - Apple
Michigan Voc-Tech Facilities
N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 6 | 9.23 |
| 0 | 24 | 36.92 |
| 1 to 10 | 28 | 43.08 |
| 11 to 20 | 6 | 9.23 |
| 21 to 30 | 1 | 1.54 |
| 30 & up | 0 | 0.00 |
| Est Total | 273 | |

Planned Inventory - Radio Shack
Michigan Voc-Tech Facilities
N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 5 | 7.69 |
| 0 | 48 | 73.85 |
| 1 to 10 | 11 | 16.92 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 1 | 1.54 |
| 30 & up | 0 | 0.00 |
| Est Total | 86 | |

Planned Inventory - IBM PC
Michigan Voc-Tech Facilities
N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 6 | 9.23 |
| 0 | 32 | 49.23 |
| 1 to 10 | 18 | 27.69 |
| 11 to 20 | 5 | 7.69 |
| 21 to 30 | 3 | 4.62 |
| 30 & up | 1 | 1.54 |
| Est Total | 289 | |

Planned Inventory - Apple Compatible
Michigan Voc-Tech Facilities
N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 6 | 9.23 |
| 0 | 54 | 83.08 |
| 1 to 10 | 5 | 7.69 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 28 | |

Planned Inventory - IBM Compatible
Michigan Voc-Tech Facilities
N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 8 | 12.31 |
| 0 | 51 | 78.46 |
| 1 to 10 | 5 | 7.69 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 1 | 1.54 |
| Est Total | 63 | |

Planned Inventory - Atari
Michigan Voc-Tech Facilities
N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 8 | 12.31 |
| 0 | 57 | 87.69 |
| 1 to 10 | 0 | 0.00 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 0 | |

Planned Inventory - Blackhawk
Michigan Voc-Tech Facilities
N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 8 | 12.31 |
| 0 | 57 | 87.69 |
| 1 to 10 | 0 | 0.00 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 0 | |

Planned Inventory - Commodore
Michigan Voc-Tech Facilities
N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 8 | 12.31 |
| 0 | 50 | 76.92 |
| 1 to 10 | 6 | 9.23 |
| 11 to 20 | 1 | 1.54 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 49 | |

Planned Inventory - All Others
Michigan Voc-Tech Facilities
N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 9 | 13.85 |
| 0 | 45 | 69.23 |
| 1 to 10 | 7 | 10.77 |
| 11 to 20 | 3 | 4.62 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 1 | 1.54 |
| Est Total | 121 | |

## CURRENT INVENTORY TABLES

### Estimated Microcomputer Hardware for Illinois Respondents Voc-Tech Facilities (49% response from 76 mailings)

Current Inventory - Apple
Illinois Voc-Tech Facilities
N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 0 | 0.00 |
| 0 | 8 | 21.62 |
| 1 to 10 | 17 | 45.95 |
| 11 to 20 | 7 | 18.92 |
| 21 to 30 | 3 | 8.11 |
| 30 & up | 2 | 5.41 |
| Est Total | 350 | |

Current Inventory - Radio Shack
Illinois Voc-Tech Facilities
N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 2.70 |
| 0 | 13 | 35.14 |
| 1 to 10 | 12 | 32.43 |
| 11 to 20 | 5 | 13.51 |
| 21 to 30 | 1 | 2.70 |
| 30 & up | 5 | 13.51 |
| Est Total | 347 | |

Current Inventory - IBM PC
Illinois Voc-Tech Facilities
N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 2.70 |
| 0 | 20 | 54.05 |
| 1 to 10 | 11 | 29.73 |
| 11 to 20 | 3 | 8.11 |
| 21 to 30 | 1 | 2.70 |
| 30 & up | 1 | 2.70 |
| Est Total | 168 | |

Current Inventory - Apple Compatible
Illinois Voc-Tech Facilities
N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 0 | 0.00 |
| 0 | 27 | 72.97 |
| 1 to 10 | 9 | 24.32 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 1 | 2.70 |
| 30 & up | 0 | 0.00 |
| Est Total | 75 | |

Current Inventory - IBM Compatible
Illinois Voc-Tech Facilities
N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 2 | 5.41 |
| 0 | 28 | 75.68 |
| 1 to 10 | 6 | 16.22 |
| 11 to 20 | 1 | 2.70 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 49 | |

Current Inventory - Atari
Illinois Voc-Tech Facilities
N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 0 | 0.00 |
| 0 | 35 | 94.59 |
| 1 to 10 | 2 | 5.41 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 11 | |

Current Inventory - Blackhawk
Illinois Voc-Tech Facilities
N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 0 | 0.00 |
| 0 | 36 | 97.30 |
| 1 to 10 | 1 | 2.70 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 6 | |

Current Inventory - Commodore
Illinois Voc-Tech Facilities
N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 0 | 0.00 |
| 0 | 22 | 59.46 |
| 1 to 10 | 7 | 18.92 |
| 11 to 20 | 4 | 10.81 |
| 21 to 30 | 3 | 8.11 |
| 30 & up | 1 | 2.70 |
| Est Total | 213 | |

Current Inventory - All Other
Illinois Voc-Tech Facilities
N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 2.70 |
| 0 | 15 | 40.54 |
| 1 to 10 | 14 | 37.84 |
| 11 to 20 | 1 | 2.70 |
| 21 to 30 | 5 | 13.51 |
| 30 & up | 1 | 2.70 |
| Est Total | 256 | |

PLANNED ADDITIONAL INVENTORY TABLES

## Estimated Microcomputer Hardware for Illinois Respondents Voc-Tech Facilities (49% response from 76 mailings)

Planned Inventory - Apple
Illinois Voc-Tech Facilities
N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 2 | 5.41 |
| 0 | 15 | 40.54 |
| 1 to 10 | 20 | 54.05 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 110 | |

Planned Inventory - Radio Shack
Illinois Voc-Tech Facilities
N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 2 | 5.41 |
| 0 | 21 | 56.76 |
| 1 to 10 | 13 | 35.14 |
| 11 to 20 | 1 | 2.70 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 87 | |

Planned Inventory - IBM PC
Illinois Voc-Tech Facilities
N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 2 | 5.41 |
| 0 | 20 | 54.05 |
| 1 to 10 | 10 | 27.03 |
| 11 to 20 | 3 | 8.11 |
| 21 to 30 | 2 | 5.41 |
| 30 & up | 0 | 0.00 |
| Est Total | 153 | |

Planned Inventory - Apple Compatible
Illinois Voc-Tech Facilities
N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 2.70 |
| 0 | 30 | 81.08 |
| 1 to 10 | 6 | 16.22 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 33 | |

Planned Inventory - IBM Compatible
Illinois Voc-Tech Facilities
N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 2.70 |
| 0 | 31 | 83.78 |
| 1 to 10 | 4 | 10.81 |
| 11 to 20 | 1 | 2.70 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 38 | |

Planned Inventory - Atari
Illinois Voc-Tech Facilities
N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 2.70 |
| 0 | 36 | 97.30 |
| 1 to 10 | 0 | 0.00 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 0 | |

Planned Inventory - Blackhawk
Illinois Voc-Tech Facilities
N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 2.70 |
| 0 | 36 | 97.30 |
| 1 to 10 | 0 | 0.00 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 0 | |

Planned Inventory - Commodore
Illinois Voc-Tech Facilities
N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 2.70 |
| 0 | 31 | 83.78 |
| 1 to 10 | 4 | 10.81 |
| 11 to 20 | 1 | 2.70 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 38 | |

Planned Inventory - All Others
Illinois Voc-Tech Facilities
N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 2 | 5.41 |
| 0 | 24 | 64.86 |
| 1 to 10 | 8 | 21.62 |
| 11 to 20 | 2 | 5.41 |
| 21 to 30 | 1 | 2.70 |
| 30 & up | 0 | 0.00 |
| Est Total | 101 | |

## CURRENT INVENTORY TABLES

### Estimated Microcomputer Hardware for Indiana Respondents Voc-Tech Facilities (33% response from 80 mailings)

Current Inventory - Apple
Indiana Voc-Tech Facilities
N= 26

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.85 |
| 0 | 12 | 46.15 |
| 1 to 10 | 8 | 30.77 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 2 | 7.69 |
| 30 & up | 3 | 11.54 |
| Est Total | 202 | |

Current Inventory - Radio Shack
Indiana Voc-Tech Facilities
N= 26

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.85 |
| 0 | 12 | 46.15 |
| 1 to 10 | 8 | 30.77 |
| 11 to 20 | 1 | 3.85 |
| 21 to 30 | 3 | 11.54 |
| 30 & up | 1 | 3.85 |
| Est Total | 172 | |

Current Inventory - IBM PC
Indiana Voc-Tech Facilities
N= 26

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.85 |
| 0 | 13 | 50.00 |
| 1 to 10 | 6 | 23.08 |
| 11 to 20 | 5 | 19.23 |
| 21 to 30 | 1 | 3.85 |
| 30 & up | 0 | 0.00 |
| Est Total | 136 | |

Current Inventory - Apple Compatible
Indiana Voc-Tech Facilities
N= 26

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.8[illegible] |
| 0 | 19 | 73.08 |
| 1 to 10 | 5 | 19.23 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 1 | 3.85 |
| Est Total | 63 | |

Current Inventory - IBM Compatible
Indiana Voc-Tech Facilities
N= 26

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.85 |
| 0 | 21 | 80.77 |
| 1 to 10 | 3 | 11.54 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 1 | 3.85 |
| 30 & up | 0 | 0.00 |
| Est Total | 42 | |

Current Inventory - Atari
Indiana Voc-Tech Facilities
N= 26

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.85 |
| 0 | 25 | 96.15 |
| 1 to 10 | 0 | 0.00 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 0 | |

Current Inventory - Blackhawk
Indiana Voc-Tech Facilities
N= 26

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.85 |
| 0 | 24 | 92.31 |
| 1 to 10 | 1 | 3.85 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 6 | |

Current Inventory - Commodore
Indiana Voc-Tech Facilities
N= 26

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.85 |
| 0 | 18 | 69.23 |
| 1 to 10 | 6 | 23.08 |
| 11 to 20 | 1 | 3.85 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 49 | |

Current Inventory - All Others
Indiana Voc-Tech Facilities
N= 26

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.85 |
| 0 | 15 | 57.69 |
| 1 to 10 | 10 | 38.46 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 55 | |

## PLANNED ADDITIONAL INVENTORY TABLES

*Estimated Microcomputer Hardware*
*for*
*Indiana Respondents Voc-Tech Facilities*
*(33% response from 80 mailings)*

Planned Inventory - Apple
Indiana Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.85 |
| 0 | 15 | 57.69 |
| 1 to 10 | 9 | 34.62 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 1 | 3.85 |
| Est Total | 85 | |

Planned Inventory - Radio Shack
Indiana Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.85 |
| 0 | 19 | 73.08 |
| 1 to 10 | 5 | 19.23 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 1 | 3.85 |
| Est Total | 63 | |

Planned Inventory - IBM PC
Indiana Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.85 |
| 0 | 13 | 50.00 |
| 1 to 10 | 6 | 23.08 |
| 11 to 20 | 4 | 15.38 |
| 21 to 30 | 1 | 3.85 |
| 30 & up | 1 | 3.85 |
| Est Total | 156 | |

Planned Inventory - Apple Compatible
Indiana Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.85 |
| 0 | 21 | 80.77 |
| 1 to 10 | 3 | 11.54 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 1 | 3.85 |
| 30 & up | 0 | 0.00 |
| Est Total | 42 | |

Planned Inventory - IBM Compatible
Indiana Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.85 |
| 0 | 21 | 80.77 |
| 1 to 10 | 3 | 11.54 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 1 | 3.85 |
| Est Total | 52 | |

Planned Inventory - Atari
Indiana Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.85 |
| 0 | 25 | 96.15 |
| 1 to 10 | 0 | 0.00 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 0 | |

Planned Inventory - Blackhawk
Indiana Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.85 |
| 0 | 25 | 96.15 |
| 1 to 10 | 0 | 0.00 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 0 | |

Planned Inventory - Commodore
Indiana Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.85 |
| 0 | 19 | 73.08 |
| 1 to 10 | 6 | 23.08 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 33 | |

Planned Inventory - All Others
Indiana Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.85 |
| 0 | 19 | 73.08 |
| 1 to 10 | 6 | 23.08 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 33 | |

## CURRENT INVENTORY TABLES

### Estimated Microcomputer Hardware for Minnesota Respondents Voc-Tech Facilities (35% response from 80 mailings)

Current Inventory - Apple
Minnesota Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| N= | 28 | |
| Omit | 1 | 3.57 |
| 0 | 0 | 0.00 |
| 1 to 10 | 12 | 42.86 |
| 11 to 20 | 8 | 28.57 |
| 21 to 30 | 3 | 10.71 |
| 30 & up | 4 | 14.29 |
| Est Total | 409 | |

Current Inventory - Radio Shack
Minnesota Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| N= | 28 | |
| Omit | 1 | 3.57 |
| 0 | 17 | 60.71 |
| 1 to 10 | 9 | 32.14 |
| 11 to 20 | 1 | 3.57 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 65 | |

Current Inventory - IBM PC
Minnesota Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| N= | 28 | |
| Omit | 0 | 0.00 |
| 0 | 9 | 32.14 |
| 1 to 10 | 13 | 46.43 |
| 11 to 20 | 2 | 7.14 |
| 21 to 30 | 3 | 10.71 |
| 30 & up | 1 | 3.57 |
| Est Total | 215 | |

Current Inventory - Apple Compatible
Minnesota Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| N= | 28 | |
| Omit | 1 | 3.57 |
| 0 | 17 | 60.71 |
| 1 to 10 | 7 | 25.00 |
| 11 to 20 | 1 | 3.57 |
| 21 to 30 | 1 | 3.57 |
| 30 & up | 1 | 3.57 |
| Est Total | 115 | |

Current Inventory - IBM Compatible
Minnesota Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| N= | 28 | |
| Omit | 1 | 3.57 |
| 0 | 19 | 67.86 |
| 1 to 10 | 6 | 21.43 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 1 | 3.57 |
| 30 & up | 1 | 3.57 |
| Est Total | 94 | |

Current Inventory - Atari
Minnesota Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| N= | 28 | |
| Omit | 1 | 3.57 |
| 0 | 22 | 78.57 |
| 1 to 10 | 4 | 14.29 |
| 11 to 20 | 1 | 3.57 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 38 | |

Current Inventory - Blackhawk
Minnesota Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| N= | 28 | |
| Omit | 1 | 3.57 |
| 0 | 27 | 96.43 |
| 1 to 10 | 0 | 0.00 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 0 | |

Current Inventory - Commodore
Minnesota Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| N= | 28 | |
| Omit | 1 | 3.57 |
| 0 | 22 | 78.57 |
| 1 to 10 | 3 | 10.71 |
| 11 to 20 | 2 | 7.14 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 48 | |

Current Inventory - All Others
Minnesota Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| N= | 28 | |
| Omit | 0 | 0.00 |
| 0 | 17 | 60.71 |
| 1 to 10 | 10 | 35.71 |
| 11 to 20 | 1 | 3.57 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 71 | |

## PLANNED ADDITIONAL INVENTORY TABLES

### Estimated Microcomputer Hardware for Minnesota Respondents Voc-Tech Facilities (35% response from 80 mailings)

Planned Inventory - Apple
Minnesota Voc-Tech Facilities

N= 28

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 2 | 7.14 |
| 0 | 8 | 28.57 |
| 1 to 10 | 13 | 46.43 |
| 11 to 20 | 5 | 17.86 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 149 | |

Planned Inventory - Radio Shack
Minnesota Voc-Tech Facilities

N= 28

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.57 |
| 0 | 24 | 85.71 |
| 1 to 10 | 3 | 10.71 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 17 | |

Planned Inventory - IBM PC
Minnesota Voc-Tech Facilities

N= 28

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 0 | 0.00 |
| 0 | 9 | 32.14 |
| 1 to 10 | 14 | 50.00 |
| 11 to 20 | 4 | 14.29 |
| 21 to 30 | 1 | 3.57 |
| 30 & up | 0 | 0.00 |
| Est Total | 165 | |

Planned Inventory - Apple Compatible
Minnesota Voc-Tech Facilities

N= 28

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 2 | 7.14 |
| 0 | 22 | 78.57 |
| 1 to 10 | 3 | 10.71 |
| 11 to 20 | 1 | 3.57 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 32 | |

Planned Inventory - IBM Compatible
Minnesota Voc-Tech Facilities

N= 28

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 3 | 10.71 |
| 0 | 21 | 75.00 |
| 1 to 10 | 4 | 14.29 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 22 | |

Planned Inventory - Atari
Minnesota Voc-Tech Facilities

N= 28

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.57 |
| 0 | 27 | 96.43 |
| 1 to 10 | 0 | 0.00 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 0 | |

Planned Inventory - Blackhawk
Minnesota Voc-Tech Facilities

N= 28

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 2 | 7.14 |
| 0 | 26 | 92.86 |
| 1 to 10 | 0 | 0.00 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 0 | |

Planned Inventory - Commodore
Minnesota Voc-Tech Facilities

N= 28

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 2 | 7.14 |
| 0 | 25 | 89.29 |
| 1 to 10 | 1 | 3.57 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 6 | |

Planned Inventory - All Others
Minnesota Voc-Tech Facilities

N= 28

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.57 |
| 0 | 24 | 85.71 |
| 1 to 10 | 2 | 7.14 |
| 11 to 20 | 1 | 3.57 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 27 | |

## CURRENT INVENTORY TABLES

### Estimated Microcomputer Hardware for Ohio Respondents Voc-Tech Facilities (32% response from 158 mailings)

Current Inventory - Apple
Ohio Voc-Tech Facilities

N= 50

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 2.00 |
| 0 | 8 | 16.00 |
| 1 to 10 | 24 | 48.00 |
| 11 to 20 | 10 | 20.00 |
| 21 to 30 | 5 | 10.00 |
| 30 & up | 2 | 4.00 |
| Est Total | 486 | |

Current Inventory - Radio Shack
Ohio Voc-Tech Facilities

N= 50

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 2 | 4.00 |
| 0 | 16 | 32.00 |
| 1 to 10 | 22 | 44.00 |
| 11 to 20 | 6 | 12.00 |
| 21 to 30 | 2 | 4.00 |
| 30 & up | 2 | 4.00 |
| Est Total | 336 | |

Current Inventory - IBM PC
Ohio Voc-Tech Facilities

N= 50

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 3 | 6.00 |
| 0 | 25 | 50.00 |
| 1 to 10 | 15 | 30.00 |
| 11 to 20 | 1 | 2.00 |
| 21 to 30 | 2 | 4.00 |
| 30 & up | 4 | 8.00 |
| Est Total | 291 | |

Current Inventory - Apple Compatible
Ohio Voc-Tech Facilities

N= 50

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 2 | 4.00 |
| 0 | 39 | 78.00 |
| 1 to 10 | 7 | 14.00 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 1 | 2.00 |
| 30 & up | 1 | 2.00 |
| Est Total | 100 | |

Current Inventory - IBM Compatible
Ohio Voc-Tech Facilities

N= 50

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 2 | 4.00 |
| 0 | 39 | 78.00 |
| 1 to 10 | 5 | 10.00 |
| 11 to 20 | 2 | 4.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 2 | 4.00 |
| Est Total | 130 | |

Current Inventory - Atari
Ohio Voc-Tech Facilities

N= 50

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 2 | 4.00 |
| 0 | 40 | 80.00 |
| 1 to 10 | 6 | 12.00 |
| 11 to 20 | 1 | 2.00 |
| 21 to 30 | 1 | 2.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 74 | |

Current Inventory - Blackhawk
Ohio Voc-Tech Facilities

N= 50

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 2 | 4.00 |
| 0 | 47 | 94.00 |
| 1 to 10 | 1 | 2.00 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 6 | |

Current Inventory - Commodore
Ohio Voc-Tech Facilities

N= 50

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 2.00 |
| 0 | 32 | 64.00 |
| 1 to 10 | 12 | 24.00 |
| 11 to 20 | 5 | 10.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 144 | |

Current Inventory - All Others
Ohio Voc-Tech Facilities

N= 50

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 3 | 6.00 |
| 0 | 22 | 44.00 |
| 1 to 10 | 14 | 28.00 |
| 11 to 20 | 7 | 14.00 |
| 21 to 30 | 2 | 4.00 |
| 30 & up | 2 | 4.00 |
| Est Total | 308 | |

*PLANNED ADDITIONAL INVENTORY TABLES*

*Estimated Microcomputer Hardware*
*for*
*Ohio Respondents Voc-Tech Facilities*
*(32% response from 158 mailings)*

Planned Inventory - Apple
Ohio Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| N= | 50 | |
| Omit | 1 | 2.00 |
| 0 | 22 | 44.00 |
| 1 to 10 | 19 | 38.00 |
| 11 to 20 | 5 | 10.00 |
| 21 to 30 | 3 | 6.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 259 | |

Planned Inventory - Radio Shack
Ohio Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| N= | 50 | |
| Omit | 1 | 2.00 |
| 0 | 35 | 70.00 |
| 1 to 10 | 12 | 24.00 |
| 11 to 20 | 1 | 2.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 1 | 2.00 |
| Est Total | 117 | |

Planned Inventory - IBM PC
Ohio Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| N= | 50 | |
| Omit | 2 | 4.00 |
| 0 | 30 | 60.00 |
| 1 to 10 | 12 | 24.00 |
| 11 to 20 | 3 | 6.00 |
| 21 to 30 | 3 | 6.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 189 | |

Planned Inventory - Apple Compatible
Ohio Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| N= | 50 | |
| Omit | 3 | 6.00 |
| 0 | 43 | 86.00 |
| 1 to 10 | 3 | 6.00 |
| 11 to 20 | 1 | 2.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 32 | |

Planned Inventory - IBM Compatible
Ohio Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| N= | 50 | |
| Omit | 2 | 4.00 |
| 0 | 41 | 82.00 |
| 1 to 10 | 5 | 10.00 |
| 11 to 20 | 1 | 2.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 1 | 2.00 |
| Est Total | 79 | |

Planned Inventory - Atari
Ohio Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| N= | 50 | |
| Omit | 2 | 4.00 |
| 0 | 48 | 96.00 |
| 1 to 10 | 0 | 0.00 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 0 | |

Planned Inventory - Blackhawk
Ohio Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| N= | 50 | |
| Omit | 2 | 4.00 |
| 0 | 48 | 96.00 |
| 1 to 10 | 0 | 0.00 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 0 | |

Planned Inventory - Commodore
Ohio Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| N= | 50 | |
| Omit | 2 | 4.00 |
| 0 | 45 | 90.00 |
| 1 to 10 | 3 | 6.00 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 17 | |

Planned Inventory - All Others
Ohio Voc-Tech Facilities

| Choices | Frequency | Percent |
|---|---|---|
| N= | 50 | |
| Omit | 2 | 4.00 |
| 0 | 33 | 66.00 |
| 1 to 10 | 11 | 22.00 |
| 11 to 20 | 2 | 4.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 2 | 4.00 |
| Est Total | 163 | |

-N-

## CURRENT INVENTORY TABLES

### Estimated Microcomputer Hardware for Wisconsin Respondents Voc-Tech Facilities (34% response from 194 mailings)

Current Inventory - Apple
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 1.52 |
| 0 | 2 | 3.03 |
| 1 to 10 | 28 | 42.42 |
| 11 to 20 | 15 | 22.73 |
| 21 to 30 | 7 | 10.61 |
| 30 & up | 13 | 19.70 |
| Est Total | 1027 | |

Current Inventory - Radio Shack
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 6 | 9.09 |
| 0 | 34 | 51.52 |
| 1 to 10 | 17 | 25.76 |
| 11 to 20 | 5 | 7.58 |
| 21 to 30 | 2 | 3.03 |
| 30 & up | 2 | 3.03 |
| Est Total | 293 | |

Current Inventory - IBM PC
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 6 | 9.09 |
| 0 | 36 | 54.55 |
| 1 to 10 | 15 | 22.73 |
| 11 to 20 | 2 | 3.03 |
| 21 to 30 | 3 | 4.55 |
| 30 & up | 4 | 6.06 |
| Est Total | 332 | |

Current Inventory - Apple Compatible
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 7 | 10.61 |
| 0 | 46 | 69.70 |
| 1 to 10 | 10 | 15.15 |
| 11 to 20 | 1 | 1.52 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 2 | 3.03 |
| Est Total | 142 | |

Current Inventory - IBM Compatible
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 8 | 12.12 |
| 0 | 54 | 81.82 |
| 1 to 10 | 4 | 6.06 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 22 | |

Current Inventory - Atari
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 7 | 10.61 |
| 0 | 47 | 71.21 |
| 1 to 10 | 8 | 12.12 |
| 11 to 20 | 2 | 3.03 |
| 21 to 30 | 2 | 3.03 |
| 30 & up | 0 | 0.00 |
| Est Total | 126 | |

Current Inventory - Blackhawk
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 7 | 10.61 |
| 0 | 58 | 87.88 |
| 1 to 10 | 1 | 1.52 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 6 | |

Current Inventory - Commodore
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 9 | 13.64 |
| 0 | 45 | 68.18 |
| 1 to 10 | 7 | 10.61 |
| 11 to 20 | 2 | 3.03 |
| 21 to 30 | 1 | 1.52 |
| 30 & up | 2 | 3.03 |
| Est Total | 166 | |

Current Inventory - All Others
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 6 | 9.09 |
| 0 | 45 | 68.18 |
| 1 to 10 | 15 | 22.73 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 93 | |

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## PLANNED ADDITIONAL INVENTORY TABLES

### Estimated Microcomputer Hardware for Wisconsin Respondents Voc-Tech Facilities (34% response from 194 mailings)

Planned Inventory - Apple
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 1.52 |
| 0 | 17 | 25.76 |
| 1 to 10 | 35 | 53.03 |
| 11 to 20 | 8 | 12.12 |
| 21 to 30 | 3 | 4.55 |
| 30 & up | 2 | 3.03 |
| Est Total | 464 | |

Planned Inventory - Radio Shack
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 5 | 7.58 |
| 0 | 51 | 77.27 |
| 1 to 10 | 10 | 15.15 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 55 | |

Planned Inventory - IBM PC
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 6 | 9.09 |
| 0 | 34 | 51.52 |
| 1 to 10 | 12 | 18.18 |
| 11 to 20 | 8 | 12.12 |
| 21 to 30 | 5 | 7.58 |
| 30 & up | 1 | 1.52 |
| Est Total | 353 | |

Planned Inventory - Apple Compatible
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 6 | 9.09 |
| 0 | 51 | 77.27 |
| 1 to 10 | 7 | 10.61 |
| 11 to 20 | 2 | 3.03 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 70 | |

Planned Inventory - IBM Compatible
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 7 | 10.61 |
| 0 | 56 | 84.85 |
| 1 to 10 | 2 | 3.03 |
| 11 to 20 | 1 | 1.52 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 27 | |

Planned Inventory - Atari
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 6 | 9.09 |
| 0 | 57 | 86.36 |
| 1 to 10 | 3 | 4.55 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 17 | |

Planned Inventory - Blackhawk
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 7 | 10.61 |
| 0 | 59 | 89.39 |
| 1 to 10 | 0 | 0.00 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 0 | |

Planned Inventory - Commodore
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 6 | 9.09 |
| 0 | 55 | 83.33 |
| 1 to 10 | 4 | 6.06 |
| 11 to 20 | 1 | 1.52 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 38 | |

Planned Inventory - All Others
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 6 | 9.09 |
| 0 | 55 | 83.33 |
| 1 to 10 | 4 | 6.06 |
| 11 to 20 | 1 | 1.52 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 38 | |

*Networking Tables*
*for*
*Respondents Voc-Tech Facilities*
*Michigan and Bordering States*
*(39% response from 705 mailings)*

Micro to Mainframe Communication
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 6 | 2.21 |
| 0 | 167 | 61.40 |
| 1 to 10 | 76 | 27.94 |
| 11 to 20 | 11 | 4.04 |
| 21 to 30 | 9 | 3.31 |
| 30 & up | 3 | 1.10 |
| Est Total | 925 | |

Use of Local Area Networking (LAN)
Michigan and Bordering States
Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 7 | 2.57 |
| Yes | 71 | 26.10 |
| No | 131 | 48.16 |
| Under Consideration | 60 | 22.06 |
| Not Under Consideration | 3 | 1.10 |

Categories of Local Area Networking
Michigan and Bordering States Voc-Tech Facilities

N= 272

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 139 | 51.10 |
| A. Classroom/Building Network | 87 | 31.99 |
| B. Local Educ. Agency Network | 9 | 3.31 |
| C. Interagency Network | 11 | 4.04 |
| A and B above | 14 | 5.15 |
| A, B, and C above | 12 | 4.41 |

*Networking Tables*
*for*
*Michigan Respondents Voc-Tech Facilities*
*(56% response from 117 mailings)*

Micro to Mainframe Communication
Michigan Voc-Tech Facilities

N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 9 | 13.85 |
| 0 | 45 | 69.23 |
| 1 to 10 | 7 | 10.77 |
| 11 to 20 | 3 | 4.62 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 1 | 1.54 |
| Est Total | 121 | |

Use of Local Area Networking (LAN)
Michigan Voc-Tech Facilities

N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 3 | 4.62 |
| Yes | 21 | 32.31 |
| No | 24 | 36.92 |
| Under Consideration | 15 | 23.08 |
| Not Under Consideration | 2 | 3.08 |

Categories of Local Area Networking
Michigan Voc-Tech Facilities

N= 65

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 30 | 46.15 |
| A. Classroom/Building Network | 23 | 35.38 |
| B. Local Educ. Agency Network | 1 | 1.54 |
| C. Interagency Network | 5 | 7.69 |
| A and B above | 3 | 4.62 |
| A, B, and C above | 3 | 4.62 |

*Networking Tables*
*for*
*Illinois Respondents Voc-Tech Facilities*
*(49% response from 76 mailings)*

Micro to Mainframe Communication
Illinois Voc-Tech Facilities

N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 2.70 |
| 0 | 24 | 64.86 |
| 1 to 10 | 8 | 21.62 |
| 11 to 20 | 1 | 2.70 |
| 21 to 30 | 2 | 5.41 |
| 30 & up | 1 | 2.70 |
| Est Total | 146 | |

Use of Local Area Networking (LAN)
Illinois Voc-Tech Facilities

N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 2.70 |
| Yes | 13 | 35.14 |
| No | 18 | 48.65 |
| Under Consideration | 5 | 13.51 |
| Not Under Consideration | 0 | 0.00 |

Categories of Local Area Networking
Illinois Voc-Tech Facilities

N= 37

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 22 | 59.46 |
| A. Classroom/Building Network | 9 | 24.32 |
| B. Local Educ. Agency Network | 1 | 2.70 |
| C. Interagency Network | 2 | 5.41 |
| A and B above | 1 | 2.70 |
| A, B, and C above | 2 | 5.41 |
| Est Total | 133 | |

*Networking Tables*
*for*
*Indiana Respondents Voc-Tech Facilities*
*(33% response from 80 mailings)*

Micro to Mainframe Communication
Indiana Voc-Tech Facilities

N= 26

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 3.85 |
| 0 | 17 | 65.38 |
| 1 to 10 | 7 | 26.92 |
| 11 to 20 | 1 | 3.85 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 54 | |

*Use of Local Area Networking (LAN)*
*Indiana Voc-Tech Facilities*

*N= 28*

| *Choices* | *Frequency* | *Percent* |
|---|---|---|
| *Omit* | *1* | *3.85* |
| *Yes* | *6* | *23.08* |
| *No* | *11* | *42.31* |
| *Under Consideration* | *8* | *30.77* |
| *Not Under Consideration* | *0* | *0.00* |

Categories of Local Area Networking
Indiana Voc-Tech Facilities

N= 26

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 12 | 46.15 |
| A. Classroom/Building Network | 11 | 42.31 |
| B. Local Educ. Agency Network | 1 | 3.85 |
| C. Interagency Network | 0 | 0.00 |
| A and B above | 1 | 3.85 |
| A, B, and C above | 1 | 3.85 |
| Est Total | 67 | |

*Networking Tables*
*for*
*Minnesota Respondents Voc-Tech Facilities*
*(35% response from 80 mailings)*

Micro to Mainframe Communication
Minnesota Voc-Tech Facilities

N= 28

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 0 | 0.00 |
| 0 | 22 | 78.57 |
| 1 to 10 | 4 | 14.29 |
| 11 to 20 | 2 | 7.14 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 53 | |

Use of Local Area Networking (LAN)
Minnesota Voc-Tech Facilities

N= 28

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 0 | 0.00 |
| Yes | 5 | 17.86 |
| No | 10 | 35.71 |
| Under Consideration | 12 | 42.86 |
| Not Under Consideration | 1 | 3.57 |

Categories of Local Area Networking
Minnesota Voc-Tech Facilities

N= 28

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 11 | 39.29 |
| A. Classroom/Building Network | 11 | 39.29 |
| B. Local Educ. Agency Network | 2 | 7.14 |
| C. Interagency Network | 0 | 0.00 |
| A and B above | 1 | 3.57 |
| A, B, and C above | 3 | 10.71 |
| Est Total | 143 | |

*Networking Tables*
*for*
*Ohio Respondents Voc-Tech Facilities*
*(32% response from 158 mailings)*

**Micro to Mainframe Communication**
**Ohio Voc-Tech Facilities**

N= 50

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 0 | 0.00 |
| 0 | 28 | 56.00 |
| 1 to 10 | 12 | 24.00 |
| 11 to 20 | 5 | 10.00 |
| 21 to 30 | 4 | 8.00 |
| 30 & up | 1 | 2.00 |
| Est Total | 281 | |

**Use of Local Area Networking (LAN)**
**Ohio Voc-Tech Facilities**

N= 50

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 0 | 0.00 |
| Yes | 14 | 28.00 |
| No | 25 | 50.00 |
| Under Consideration | 11 | 22.00 |
| Not Under Consideration | 0 | 0.00 |

**Categories of Local Area Networking**
**Ohio Voc-Tech Facilities**

N= 50

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 23 | 46.00 |
| A. Classroom/Building Network | 18 | 36.00 |
| B. Local Educ. Agency Network | 1 | 2.00 |
| C. Interagency Network | 1 | 2.00 |
| A and B above | 5 | 10.00 |
| A, B, and C above | 2 | 4.00 |
| Est Total | 220 | |

*Networking Tables*
*for*
*Wisconsin Respondents Voc-Tech Facilities*
*(34% response from 194 mailings)*

Micro to Mainframe Communication
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 1 | 1.52 |
| 0 | 43 | 65.15 |
| 1 to 10 | 22 | 33.33 |
| 11 to 20 | 0 | 0.00 |
| 21 to 30 | 0 | 0.00 |
| 30 & up | 0 | 0.00 |
| Est Total | 121 | |

Use of Local Area Networking (LAN)
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 2 | 3.03 |
| Yes | 12 | 18.18 |
| No | 43 | 65.15 |
| Under Consideration | 9 | 13.64 |
| Not Under Consideration | 0 | 0.00 |

Categories of Local Area Networking
Wisconsin Voc-Tech Facilities

N= 66

| Choices | Frequency | Percent |
|---|---|---|
| Omit | 41 | 62.12 |
| A. Classroom/Building Network | 15 | 22.73 |
| B. Local Educ. Agency Network | 3 | 4.55 |
| C. Interagency Network | 3 | 4.55 |
| A and B above | 3 | 4.55 |
| A, B, and C above | 1 | 1.52 |
| Est Total | 175 | |

Software Applications -- *Part I*

| Categories | Michigan | | | | Illinois | | | | Indiana | | | | Minnesota | | | | Ohio | | | | Wisconsin | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Samp Size | % Yes | % No | % No Resp | Samp Size | % Yes | % No | % No Resp | Samp Size | % Yes | % No | % No Resp | Samp Size | % Yes | % No | % No Resp | Samp Size | % Yes | % No | % No Resp | Samp Size | % Yes | % No | % No Resp |
| Admin Acct and Finance | 65 | 40 | 55 | 5 | 37 | 40 | 57 | 3 | 26 | 31 | 58 | 11 | 28 | 61 | 36 | 3 | 50 | 50 | 50 | 0 | 66 | 52 | 45 | 3 |
| Admin Analysis (spreadsheet) | 65 | 41 | 54 | 5 | 37 | 40 | 57 | 3 | 26 | 23 | 65 | 12 | 28 | 46 | 50 | 4 | 50 | 42 | 58 | 0 | 66 | 44 | 53 | 3 |
| Admin Data Base Applications | 65 | 41 | 54 | 5 | 37 | 46 | 51 | 3 | 26 | 39 | 50 | 11 | 28 | 50 | 46 | 4 | 50 | 42 | 56 | 2 | 66 | 56 | 41 | 3 |
| Admin Word Processing | 65 | 49 | 46 | 5 | 37 | 76 | 21 | 3 | 26 | 46 | 42 | 12 | 28 | 61 | 36 | 3 | 50 | 68 | 28 | 4 | 66 | 52 | 45 | 3 |
| Admin Electronic Mail | 65 | 6 | 88 | 6 | 37 | 16 | 81 | 3 | 26 | 4 | 85 | 11 | 28 | 11 | 86 | 3 | 50 | 6 | 92 | 2 | 66 | 9 | 88 | 3 |
| Admin Computer Appt Calendar | 65 | 4 | 88 | 8 | 37 | 8 | 89 | 3 | 26 | 12 | 77 | 11 | 28 | 0 | 96 | 4 | 50 | 0 | 98 | 2 | 66 | 3 | 94 | 3 |
| Instr Support-Test Generation | 65 | 38 | 54 | 8 | 37 | 49 | 49 | 2 | 26 | 35 | 54 | 11 | 28 | 50 | 46 | 4 | 50 | 44 | 54 | 2 | 66 | 47 | 49 | 4 |
| Instr Support-Data Base | 65 | 48 | 41 | 11 | 37 | 46 | 51 | 3 | 26 | 42 | 46 | 12 | 28 | 43 | 50 | 7 | 50 | 48 | 46 | 6 | 66 | 59 | 30 | 11 |
| Instr Support-Word Processing | 65 | 69 | 26 | 5 | 37 | 73 | 24 | 3 | 26 | 62 | 27 | 11 | 28 | 71 | 25 | 4 | 50 | 86 | 12 | 2 | 66 | 70 | 27 | 3 |
| C.A.I. (Comp Assisted Instr) | 65 | 57 | 34 | 9 | 37 | 76 | 21 | 3 | 26 | 62 | 27 | 11 | 28 | 79 | 18 | 3 | 50 | 58 | 40 | 2 | 66 | 70 | 23 | 7 |
| C.M.I. (Comp Managed Instr) | 65 | 32 | 62 | 6 | 37 | 32 | 65 | 3 | 26 | 23 | 66 | 11 | 28 | 39 | 54 | 4 | 50 | 26 | 70 | 4 | 66 | 38 | 56 | 6 |
| Educational Simulations | 65 | 46 | 48 | 6 | 37 | 51 | 46 | 3 | 26 | 62 | 27 | 11 | 28 | 50 | 46 | 4 | 50 | 56 | 40 | 4 | 66 | 58 | 38 | 4 |
| Job Placement | 65 | 31 | 65 | 4 | 37 | 13 | 84 | 3 | 26 | 23 | 65 | 12 | 28 | 25 | 71 | 4 | 50 | 26 | 70 | 4 | 66 | 17 | 80 | 3 |
| Counseling | 65 | 26 | 69 | 5 | 37 | 27 | 70 | 3 | 26 | 39 | 46 | 15 | 28 | 14 | 82 | 4 | 50 | 36 | 60 | 4 | 66 | 46 | 50 | 4 |
| Computer Occup Info System | 65 | 59 | 33 | 6 | 37 | 43 | 54 | 3 | 26 | 50 | 39 | 11 | 28 | 43 | 54 | 3 | 50 | 54 | 44 | 2 | 66 | 62 | 33 | 5 |

*Software Applications -- Part 2*

Vocational-Technical Service Group Software Utilization

| Categories | Michigan | | | | Illinois | | | | Indiana | | | | Minnesota | | | | Ohio | | | | Wisconsin | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Samp Size | % Yes | % No | % No Resp | Samp Size | % Yes | % No | % No Resp | Samp Size | % Yes | % No | % No Resp | Samp Size | % Yes | % No | % No Resp | Samp Size | % Yes | % No | % No Resp | Samp Size | % Yes | % No | % No Resp |
| **Agricultural Software** | | | | | | | | | | | | | | | | | | | | | | | | |
| Farm Mgmt and Acct | 65 | 12 | 82 | 6 | 37 | 43 | 54 | 3 | 26 | 12 | 69 | 19 | 28 | 61 | 32 | 7 | 50 | 28 | 64 | 8 | 66 | 56 | 39 | 5 |
| Dairy Herd Management | 65 | 6 | 85 | 9 | 37 | 5 | 89 | 6 | 26 | 12 | 69 | 19 | 28 | 39 | 50 | 11 | 50 | 12 | 80 | 8 | 66 | 50 | 44 | 6 |
| Financial Projection | 65 | 11 | 80 | 9 | 37 | 27 | 70 | 3 | 26 | 16 | 65 | 19 | 28 | 71 | 21 | 8 | 50 | 26 | 68 | 6 | 66 | 41 | 53 | 6 |
| Forest/Plant Mgmt | 65 | 5 | 88 | 7 | 37 | 11 | 87 | 2 | 26 | 8 | 73 | 19 | 28 | 7 | 86 | 7 | 50 | 10 | 84 | 6 | 66 | 14 | 82 | 4 |
| Crop Management | 65 | 5 | 86 | 9 | 37 | 30 | 68 | 2 | 26 | 12 | 69 | 19 | 28 | 36 | 57 | 7 | 50 | 22 | 72 | 6 | 66 | 44 | 50 | 6 |
| **Business Education** | | | | | | | | | | | | | | | | | | | | | | | | |
| Word Processing | 65 | 80 | 15 | 5 | 37 | 92 | 5 | 3 | 26 | 73 | 12 | 15 | 28 | 86 | 11 | 3 | 50 | 90 | 6 | 4 | 66 | 85 | 11 | 4 |
| Accounting/Bookkeeping | 65 | 80 | 15 | 5 | 37 | 54 | 43 | 3 | 26 | 65 | 19 | 16 | 28 | 86 | 11 | 3 | 50 | 80 | 12 | 8 | 66 | 74 | 21 | 5 |
| Data Processing | 65 | 79 | 17 | 4 | 37 | 87 | 11 | 2 | 26 | 65 | 15 | 20 | 28 | 79 | 18 | 3 | 50 | 78 | 18 | 4 | 66 | 70 | 26 | 4 |
| Banking | 65 | 19 | 77 | 4 | 37 | 11 | 84 | 5 | 26 | 31 | 50 | 19 | 28 | 39 | 57 | 4 | 50 | 32 | 64 | 4 | 66 | 21 | 76 | 3 |
| Electronic Calendaring | 65 | 6 | 88 | 6 | 37 | 8 | 84 | 8 | 26 | 12 | 69 | 19 | 28 | 11 | 86 | 3 | 50 | 4 | 92 | 4 | 66 | 3 | 88 | 9 |
| Electronic Mail | 65 | 11 | 85 | 4 | 37 | 5 | 92 | 3 | 26 | 8 | 73 | 19 | 28 | 11 | 86 | 3 | 50 | 8 | 88 | 4 | 66 | 11 | 86 | 3 |
| **Distributive Education** | | | | | | | | | | | | | | | | | | | | | | | | |
| Inventory Control | 65 | 43 | 52 | 5 | 37 | 11 | 87 | 2 | 26 | 23 | 58 | 19 | 28 | 50 | 39 | 11 | 50 | 26 | 68 | 6 | 66 | 30 | 65 | 5 |
| Point of Sale Term'l | 65 | 26 | 69 | 5 | 37 | 8 | 89 | 3 | 26 | 8 | 69 | 23 | 28 | 25 | 64 | 11 | 50 | 10 | 84 | 6 | 66 | 9 | 85 | 6 |
| Financial Analysis | 65 | 31 | 65 | 4 | 37 | 14 | 84 | 2 | 26 | 15 | 65 | 20 | 28 | 54 | 36 | 10 | 50 | 16 | 78 | 6 | 66 | 23 | 73 | 4 |
| **Health Occupations** | | | | | | | | | | | | | | | | | | | | | | | | |
| Respiratory Therapy | 65 | 9 | 85 | 6 | 37 | 5 | 89 | 6 | 26 | 15 | 69 | 16 | 28 | 4 | 89 | 7 | 50 | 4 | 88 | 8 | 66 | 5 | 90 | 5 |
| Health Records | 65 | 12 | 82 | 6 | 37 | 24 | 73 | 3 | 26 | 15 | 65 | 20 | 28 | 7 | 89 | 4 | 50 | 16 | 78 | 6 | 66 | 8 | 85 | 7 |
| Simulation | 65 | 17 | 75 | 8 | 37 | 8 | 89 | 3 | 26 | 19 | 62 | 19 | 28 | 14 | 79 | 7 | 50 | 16 | 76 | 8 | 66 | 9 | 82 | 9 |
| Nursing | 65 | 12 | 79 | 9 | 37 | 14 | 81 | 5 | 26 | 19 | 58 | 23 | 28 | 4 | 93 | 3 | 50 | 8 | 78 | 14 | 66 | 6 | 85 | 9 |
| Diagnosis/Testing | 65 | 8 | 83 | 9 | 37 | 11 | 87 | 2 | 26 | 15 | 73 | 12 | 28 | 7 | 86 | 7 | 50 | 8 | 86 | 6 | 66 | 5 | 89 | 6 |
| **Home Economics** | | | | | | | | | | | | | | | | | | | | | | | | |
| Food and Nutrition | 65 | 14 | 75 | 11 | 37 | 5 | 92 | 3 | 26 | 12 | 73 | 15 | 28 | 29 | 61 | 10 | 50 | 18 | 76 | 6 | 66 | 49 | 44 | 7 |
| Recipes & Menu Planning | 65 | 15 | 75 | 10 | 37 | 0 | 97 | 3 | 26 | 12 | 73 | 15 | 28 | 25 | 64 | 11 | 50 | 20 | 74 | 6 | 66 | 41 | 53 | 6 |
| Home Budgeting & Acct | 65 | 14 | 78 | 8 | 37 | 3 | 95 | 2 | 26 | 15 | 69 | 16 | 28 | 21 | 68 | 11 | 50 | 14 | 80 | 6 | 66 | 36 | 58 | 6 |
| Other Home Ec Related | 65 | 11 | 82 | 7 | 37 | 5 | 92 | 3 | 26 | 12 | 69 | 19 | 28 | 21 | 71 | 8 | 50 | 28 | 66 | 6 | 66 | 32 | 65 | 3 |
| **Industrial-Technical** | | | | | | | | | | | | | | | | | | | | | | | | |
| CAD/CAM | 65 | 45 | 51 | 4 | 37 | 54 | 43 | 3 | 26 | 31 | 54 | 15 | 28 | 46 | 47 | 7 | 50 | 48 | 48 | 4 | 66 | 46 | 52 | 2 |
| Computer Graphics | 65 | 39 | 55 | 6 | 37 | 62 | 35 | 3 | 26 | 26 | 58 | 16 | 28 | 46 | 47 | 7 | 50 | 44 | 52 | 4 | 66 | 38 | 58 | 4 |
| Graphic Arts/Printing | 65 | 31 | 63 | 6 | 37 | 24 | 73 | 3 | 26 | 39 | 42 | 19 | 28 | 39 | 54 | 7 | 50 | 30 | 66 | 4 | 66 | 26 | 71 | 3 |
| Electrical/Electronics | 65 | 59 | 37 | 4 | 37 | 68 | 30 | 2 | 26 | 42 | 42 | 16 | 28 | 64 | 29 | 7 | 50 | 54 | 42 | 4 | 66 | 33 | 64 | 3 |
| Robotics | 65 | 39 | 55 | 6 | 37 | 35 | 62 | 3 | 26 | 35 | 50 | 15 | 28 | 39 | 54 | 7 | 50 | 34 | 62 | 4 | 66 | 17 | 82 | 1 |
| Computer Technology | 65 | 43 | 52 | 5 | 37 | 43 | 54 | 3 | 26 | 46 | 39 | 15 | 28 | 54 | 39 | 7 | 50 | 52 | 44 | 4 | 66 | 33 | 65 | 2 |
| Building Construction | 65 | 6 | 89 | 5 | 37 | 22 | 76 | 2 | 26 | 19 | 62 | 19 | 28 | 25 | 68 | 7 | 50 | 12 | 82 | 6 | 66 | 27 | 71 | 2 |
| Problem Solving | 65 | 26 | 66 | 8 | 37 | 38 | 57 | 5 | 26 | 35 | 50 | 15 | 28 | 54 | 39 | 7 | 50 | 40 | 52 | 8 | 66 | 47 | 52 | 1 |



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